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BURMA & CEYLON.

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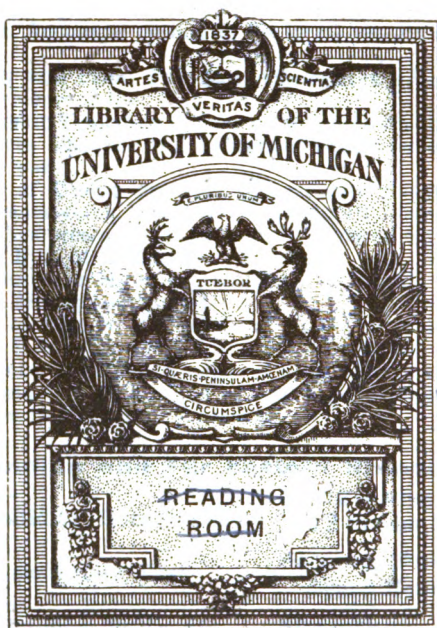
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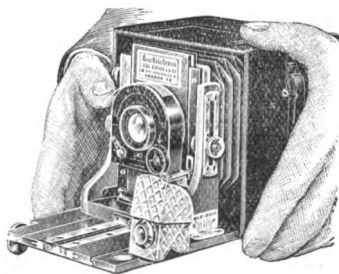
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A HANDBOOK TO
INDIA
BURMA AND CEYLON

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INDIAN CURRENCY

One rupee = 16 annas (1s. 6d.) ; 1 lakh = 100,000 rs. (£7500) ; 1 crore = 100 lakhs (£750,000).

GOVERNMENT OF INDIA NOTES (value, rupees 1, 5, 10, 50, 100, 1000, 10,000) circulate throughout India.

Silver Coins—

- 1 RUPEE = sixteen annas. = 32[†]
 $\frac{1}{2}$ RUPEE = eight annas.
 $\frac{1}{4}$ RUPEE = four annas.
 $\frac{1}{8}$ RUPEE = two annas.

Nickel Money—

- 8 ANNAS.
4 ANNAS.
1 ANNA.

Copper Coins—

- 1 ANNA = four pice = twelve pie.
 $\frac{1}{2}$ ANNA = two pice = six pie.
 $\frac{1}{4}$ ANNA = one pice = three pie.
 $\frac{1}{12}$ th ANNA = one pie.

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A HANDBOOK FOR TRAVELLERS IN INDIA BURMA AND CEYLON

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POSSESSIONS, AND THE INDIAN STATES.

"India and the Golden Chersonese
And utmost Indian Isle Taprobane,
Dusk faces with white silken turbans wreathed."

—MILTON, *Par. Reg.*, iv. 74-76

THIRTEENTH EDITION

WITH NUMEROUS MAPS AND PLANS

LONDON
JOHN MURRAY, ALBEMARLE STREET
CALCUTTA: THACKER, SPINK, & CO.

1929

DC
416
H24
1929

THE FOLLOWING ABBREVIATIONS ARE USED IN THIS BOOK.

<i>A.H.</i>	{ Year of Hijra (the Hegira).	<i>Rs.</i>	Rupees.
<i>As.</i>	Annas.	<i>ry</i>	Railway.
<i>B.I.S.N.</i>	{ British India Steam Navigation Co.	<i>stn</i>	Station.
<i>Cants.</i>	Cantonments.	<i>S.</i>	South.
<i>C.M.S.</i>	{ Church Missionary Society.	<i>U.P.</i>	United Provinces.
<i>D.B.</i>	{ Dak Bungalow, a rest-house for travellers.	<i>W.</i>	West.
<i>dt.</i>	District.	<i>W. J. Canal</i>	Western Jumna Canal.
<i>E.</i>	East.	<i>yds.</i>	Yards.
<i>E.I. Company</i>	East India Company.	<i>A.B.R.</i>	Assam Bengal Railway.
<i>ft.</i>	Feet.	<i>B.B. & C.I.</i> {	Bombay, Baroda, and Central India Railway.
<i>G.T. Road</i> ...	Grand Trunk Road.	<i>B.N.R.</i>	{ Bengal Nagpur Railway.
<i>in.</i>	Inch.	<i>B.N.W.R.</i> {	Bengal and North-Western Railway.
<i>jn.</i>	Junction.	<i>E.B.R.</i>	Eastern Bengal Railway.
<i>m.</i>	Mile, Million.	<i>E.I.R.</i>	East Indian Railway.
<i>N.</i>	North.	<i>G.I.P.R.</i> ...	{ Great Indian Peninsular Railway.
<i>p.</i>	Page.	<i>M. & S.M.</i> {	Madras and Southern Mahratta Railway.
<i>P. & O.</i>	{ Peninsular and Oriental Steam Navigation Co.	<i>N.W.R.</i>	North-Western Railway.
<i>pop.</i>	Population.	<i>R.K.R.</i>	Rohilkhand Kumaun Railway.
<i>R.</i>	Refreshment Room.	<i>S.I.R.</i>	South Indian Railway.
<i>R.C.</i>	Roman Catholic.		
<i>R.H.</i>	Rest-house.		

* This sign in the text appended to a name indicates that further information relating to the subject is to be found in the *Index and Directory* at the end.

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PREFACE TO THE THIRTEENTH EDITION

THE *Handbook for Travellers in India* was originally published by Mr John Murray in three volumes for the Bombay, Madras and Bengal Presidencies. The first of these parts appeared in 1859, the Bengal volume not till 1882. A fourth volume dealing with the Punjab and North-West India was added in 1883. They were prepared by Captain E. B. Eastwick, M.P., who made long visits to India in the fifties, sixties, and seventies of the nineteenth century, in order to collect the material for them on the spot.

These volumes were revised and brought up to date on several occasions, and in 1892 the Handbook was issued in a single volume. The description of Ceylon was written by Sir Arthur Gordon, G.C.M.G. (afterwards Lord Stanmore); and the whole Handbook passed through the hands of Sir George W. Forrest, C.I.E., then Keeper of Records to the Government of India. A second edition of the consolidated Handbook was published in 1894.

The third edition was issued in 1898, the general revision being undertaken by Mr Norwood Young. The next, the fourth edition, which was a reprint of the third, brought up to date, was prepared in 1901 by Dr Burgess, C.I.E. The fifth was a thorough revision, undertaken by Mr Herbert C. Fanshawe, C.S.I., in 1904; and in that the Ceylon part was revised by Mr C. G. Ryan. The sixth, which was a reprint of the fifth, brought up to date, was also undertaken by Mr Fanshawe in 1907. The seventh in 1908 was undertaken by the same editor; and was mainly a reprint of the fifth. The sections on Burma and Ceylon were finally revised with the assistance of Mr G. E. Marindin and Mr C. G. Ryan.

The next general revision was made in the eighth edition of 1911 by Mr Fanshawe. By 1913 another edition was called for, and a complete revision in the ninth was made by Mr Charles E. Buckland, C.I.E. The tenth edition of 1919, which was likewise a general revision, was also prepared by Mr Buckland; but it suffered from the disabilities arising from the Great War. In 1920 a reprint of the 1919 edition was issued, with a few changes

necessitated by the lapse of time, the conclusion of the war, and new information received ; but it was not considered to be a new edition. The revision for the eleventh (1924) and the twelfth (1926) editions was undertaken by Sir John G. Cumming, K.C.I.E., C.S.I.

In the course of these revisions much additional information was added to the Introduction regarding the peoples of India and its former Rulers ; its history, religions, architecture, and arts ; its physical and economic conditions ; its Government and administration. New maps were added from time to time, and improved maps substituted for out-of-date maps. Special attention was given to the increased facilities for motor travel : and the figures for the last census (1921) were incorporated in the eleventh edition.

The present edition, the thirteenth, has been prepared by Sir Evan Cotton, C.I.E. Certain rearrangements and additions have been made, which will, it is hoped, conduce to the convenience of the traveller. Particulars are supplied of the new Air Route to India. Lahore now appears as a separate section ; Sind and Baluchistan have been grouped together ; the routes from Calcutta to Darjeeling, Dacca, and Shillong, which are operated by the same railway system, have been amalgamated. The sections dealing with Benares, Chitor, Udaipur, Lucknow, and Hyderabad (Deccan) have been re-written, and the sections on Bombay, Calcutta, New Delhi, Poona, Ranchi, and Madras, have been recast. Mamallapuram (the Seven Pagodas), Conjeeveram and Chingleput, which form a favourite and pleasant excursion from Madras, have been combined into a single section. The Caves of Ajanta and Ellora are now easy of access, and the sections relating to these places have been remodelled accordingly. An account of the Caves of Bagh is given for the first time : and the descriptions of the excavations at Harappa and Mohendjoaro have been revised. A guide to the pronunciation of Burmese names now accompanies the section on Burma ; and a few hints on the pronunciation of Indian words have been inserted in the Introduction. New maps or plans of the Imperial capital at Delhi, Lucknow, Fatehpur Sikri, Mount Abu and the Dilwara temples, Shillong, Patna, Hyderabad (Deccan) and the Khyber Railway have been provided ; and other maps, including the railway map in the end pocket, have been corrected. Every effort has been made to bring the information both in the Introduction and in the text, up-to-date ; and a slight increase

in the number of pages has been unavoidable in order to keep pace with the most recent developments of travel in India. At the same time, the utmost care has been taken to omit nothing of an essential character, and to keep the size of the volume within convenient limits. The Directory and Index have received the closest examination, and each entry has been checked. In this portion of the book will be found a mass of details regarding hotels, banks, shops, conveyances, and the like.

The spelling followed has been, nearly always, that adopted in the one-millionth scale maps of the Imperial Atlas issued by the Indian Survey Department. This system is admittedly based to some extent on compromise, and makes exceptions in favour of the older, though irregular, spelling in the case of certain well-known places. In the case of Ceylon, the spelling adopted by the Survey Department, Ceylon, has been followed.

No attempt has been made to indicate tours, as these must depend so much on the tastes and interests of individuals. The places have been described under the heads of fifty-one routes, many of which coincide with the recognised and popular tracks followed by tourists. The list of these routes given on pp. xiii-xvi will, it is believed, enable travellers to form for themselves any tours which they may wish to make; and all further details can be obtained from the London Office of the Indian State Railways (14 Cockspur Street, S.W.1), or from Messrs Thos. Cook & Son, or from other Agencies.

In this, as in former editions, the newest information has been obtained from officials and other residents in India, Burma, and Ceylon. The Editor has, in fact, been favoured with willing assistance from so many sources that he finds it difficult to give a complete list of all those to whom his thanks are due. But he feels it to be his duty to mention the following in particular, for their voluntary and courteous co-operation has materially lightened his labours: Sir Richard Burn, C.S.I., C.I.E.; Mr Percy Brown, late Principal of the School of Art at Calcutta; Professor D. G. E. Hall, of Rangoon; Mr H. G. Rawlinson, Principal of the Deccan College, Poona; Lieut.-Col. G. D. Ogilvie, late Resident at Udaipur and now Resident in Kashmir; Sir Akbar Hydari, member of H.E.H. the Nizam's Council, and Mr G. Yazdani, Director of Archæology, Hyderabad (Deccan); Mr F. M. B. Rosenthal and Mrs Ethel Rosenthal, F.R.G.S., of Secunderabad; Sir John Marshall, C.I.E., Director-General of Archæology in India; Colonel Walton, Agent of the North-

Western Railway, Peshawar; Mr F. Willows, Editor of the *Madras Mail*; Sir Stanley Reed and Mr S. T. Sheppard, of Bombay; Mr A. M. Rouse, C.I.E., Chief Engineer, Delhi; Mr V. N. Mehta, I.C.S., Collector of Benares; Mr W. B. Brett, I.C.S., Deputy-Commissioner of Ranchi; Mr H. L. O. Garrett, Director of Records, Lahore; Mr A. T. Stowell, C.I.E., and Mr V. H. Boalth, C.B.E., of the London Office of the Indian State Railways; Mr J. A. Davis, M.L.C., Ootacamund; Major H. Scott Nicholson, of the *Times of Ceylon*; Mr A. J. Fraser Blair of the *Calcutta Statesman*; Mr M. B. Garde, Superintendent of Archæology in the Gwalior State; Messrs Thomas Cook & Son; and the Foreign Touring Department of the Automobile Association. The instructive note on Photography in India, which is printed on p. xvi, has been specially written by Major T. Sutton. Various officials at the India Office have most kindly supplied the latest available statistics; the Survey of India Department have generously provided their most recent maps; and a number of district officers in the Madras Presidency and elsewhere have readily contributed their local knowledge. The Editor is indebted also to the Governor of the Central Provinces and the late and present Governors of the United Provinces, who were good enough to circularise their officers on his behalf. To each and all, and to the many other friends who have assisted him, he desires to offer his most sincere thanks.

Mr Murray desires to associate himself with the Editor in according his best thanks to all whom the latter has mentioned for the great help with which they have favoured him. To many visitors to the East, friends and travellers, from whom he has received valuable aid, Mr Murray desires to express his gratification at the very kind reception accorded by them to the usefulness and completeness of the Handbook in the past.

It is impossible, amidst such a multiplicity of detail, to ensure perfection in any Handbook, however carefully prepared. The Publisher therefore hopes that the indulgent traveller will kindly point out any inaccuracies, with a view to their correction on the first opportunity. Any such acceptable communications may be addressed to Mr Murray, 50A Albemarle Street, London, W.1.

March 1929

** This sign in the text appended to a name indicates that further information relating to a subject is to be found in the INDEX AND DIRECTORY at the end of the book.*

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[The names of places are printed in black only in those Routes where the places themselves are described.]

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1 Bombay and the Environs . . .	I	Barwa-Sagar, Harpalpur (for Nowgong and Khaj- raho), Banda and Manik- pur; (3) Datia, Gwalior, Dholpur, and Agra, Muttra and Delhi . . .	163
2 Bombay to Calcutta by Kalyan, Nasik, Manmar, Jalgaon (Caves of Ajanta), Bhusawal, Khandwa, Itarsi, Piparia (for Pach- marhi), Jubbulpore (for the Marble Rocks), Katni, Manikpur, Allahabad, Mu- ghal-sarai (for Benares), and thence to Asansol and Howrah, <i>vid</i> (a) E.I.R. Grand Chord, by Gaya (Buddh Gaya), and Isri (for Parasnath); and (b) E.I.R. main line by Arrah and Patna . . .	37	10 Bombay to Delhi by Surat, Broach, Miyagam (for Dabhoi), Baroda, and Ah- madabad by broad-gauge (B.B.C.I.R.), thence by metre-gauge to Delhi (849 m.) by Mehsana, Palanpur, Abu Road (for Mt. Abu), Marwar Junc- tion (for Luni Junction, branch line to Hydera- bad, Sind, and Karachi), Jodhpur, Merta Road (for Bikanir), Ajmer, Phalera Junction, Jaipur, Bandi- kui Junction, Alwar, Rewari, and Gurgaon . . .	191
3 Caves of Ajanta . . .	67	11 From Ahmadabad through Kathiawar by Viramgam, Kharaghoda, Wadhwan, Palitana (for Satrunjaya Hill), Bhaunagar, Juna- gadh, Girnar, Somnath, Porbandar, Rajkot, Jam- nagar, and Dwarka, and back to Ahmadabad . . .	232
4 Manmar to Daulatabad, The Caves of Ellora, Auranga- bad, Jalna, and Secun- derabad . . .	73	12 Baroda by B.B.C.I. Ry. (broad-gauge) to Cham- paner Road (for Cham- paner and Pavagadh), Bayana Junction (for Agra), Bharatpur, Mut- tra, and Delhi . . .	252
5 Benares and Sarnath . . .	87	13 Agra and Fatehpur-Sikri . . .	265
6 Calcutta City and Environs . . .	104	14 Delhi . . .	287
7 Bhusawal to Calcutta (How- rah) by Akola, Wardha (for Warora and Chanda), Nagpur, Kampti, Raipur, Bilaspur, and Sini, and from Sini to (a) Purulia and Asansol; and (b) Ranchi and Kharagpur . . .	136	15 (a) Delhi to Kasauli (171 m.), and Simla (219 m.) by Panipat, Thanesar, Am- ritsar . . .	
8 Khandwa to Ajmer by Mor- takka (for Omkarji), Mhow (for Mandu and the Caves of Bagh), Indore, Ujjain, Ratlam, Nimach, Chitorgarh (for Udaipur), and Nasirabad . . .	147		
9 Itarsi Junction to Jhansi, by Bhopal, Sanchi, and Bina (line to Saugor); and from Jhansi to (1) Kalpi and Cawnpore; (2) Orchha,			

ROUTE	PAGE	ROUTE	PAGE
bala, and Kalka (162 m.); (b) Delhi to Lahore (310 m.), by Ghaziabad Junction, Meerut, Sardhana, Saharanpur, Ambala, Sirhind, Ludhiana, Jullundur, and Amritsar; and from Amritsar to Dalhousie and the Kangra Valley; (c) Delhi to Lahore (297 m.) by Jakhal, Bhatinda, Ferozepore, Kasur, and Railwind	327	for Kathgodam, Naini Tal, Almora, and Ranikhet; thence to Lucknow and on to Benares by (a) Rae Bareilly and Partabgarh; and (b) Fyzabad, Ajudhya, and Jaunpur	419
16. Lahore	355	21 Delhi to Allahabad on the East Indian Railway by Ghaziabad, Aligarh, Hathras Junction, Tundla Junction, Etawah, and Cawnpore, and Cawnpore to Lucknow	435
17 Lahore to Peshawar and the Khyber Pass by Gujranwala, Wazirabad Junction (for Sialkot and Jammu), Gujrat, Lala Musa Junction (for Western Punjab), Jhelum, Rohtas, Manikyal, Rawal Pindi, Golra (for Khushalgarh and Kohat), Taxila, Hassan Abdal (for Abbottabad), Attock, and Naushahra (for Hoti Mardan and the Malakand)	369	22 Lucknow	446
18 Kashmir	389	23 (a) Calcutta (Howrah) by the East Indian Railway loop-line to Lakhi-sarai and Mokameh, by Naihati Junction (for Azimganj), Tinpahar Junction (for Rajmahal), Sahibganj, Bhagalpur and Jamalpur (for Monghyr); (b) Mokameh, by Bengal and North-Western Railway main line to Tirhut and Cawnpore <i>via</i> Gorakhpur; (c) Calcutta (Sealdah) by Eastern Bengal Railway to Plassey, Murshidabad, Lalgola Ghat (for Malda, Gaur, and Pandua), and Katihar Junction (for Bengal and N.W. Railway main line)	471
19 (a) Lahore to Karachi by Montgomery (for Harappa), Multan, Sher Shah Junction, Bahawalpur, Samasata, Rohri, Khairpur, Hyderabad (Sind), Kotri, and Jangshahi (for Tatta), and from Rohri to Sukkur, Ruk Junction, Larkana, Dogri (for Mohenjodaro), Sehwan and Kotri; (b) Ruk Junction to Chaman on the frontier of Afghanistan by Shikarpur, Jacobabad, Sibi Junction, and Quetta, returning to Sibi by the Harnai route	400	24 Calcutta (Sealdah) by the Eastern Bengal Railway to (1) Kurseong and Darjeeling; routes into Sikhim and Tibet; (2) Goalundo, for Narayanganj, Dacca, and Eastern Bengal; (3) Goalundo and Chandpur; thence by Assam-Bengal Railway to Chittagong, Sylhet and Cachar (Surma Valley); (4) Gauhati, Shillong, and Assam Valley (Circular Tour)	483
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29 Hotgi Junction to Bijapur, Caves and Temples of Badami, and Gadag Junction . . .	571	36 Madras to Colombo by the South Indian Railway by way of Chingleput, Tindivanam (for Gingee), Villupuram (for Pondicherry), Cuddalore (for Fort St David), Porto Novo, Chidambaram, Mayavaram (for Tiruvalur and Tranquebar), Kumbakonam, Tanjore (for Negapatam), Trichinopoly, Dindigal, Kodakanal, Madura (for Tuticorin, Tinnevely, Kuttalam, Cape Comorin, Quilon, and Trivandrum), Rameswaram, and Dhanushkodi (for Talaimannar in Ceylon) . . .	654
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PHOTOGRAPHY IN INDIA

A CAMERA is almost indispensable as part of a traveller's equipment in India. The advanced worker will be well advised to take with him a high quality instrument, such as Sinclair's "Una"; but the needs of the average amateur will be amply served by the ordinary roll-film camera. Reflex cameras are apt to be cumbersome. Roll-films or film-packs are in general use: plates are not always easy to procure. Panchromatic films give excellent results when carefully exposed.

The use of an exposure meter is recommended; but much can be learned from an experimental exposure of a roll of film. It is generally possible to take snaps a few minutes after dawn; the long shadows at that hour afford many artistic opportunities. The possibilities for hand cinematograph work are innumerable; and charming pictures can be obtained with panchromatic or colour films, with a suitable screen. Plates and films should be developed as soon after exposure as possible.



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INTRODUCTORY INFORMATION

(1) GENERAL HINTS

SEASON FOR VISIT

THE season for a pleasant visit to the plains of India and Burma lies between 15th November and the end of March. In the Punjab these dates can be slightly extended ; but in October and April the heat is apt to be severe in the Red Sea and at the ports of arrival and departure. Up to 15th October and after 10th April the weather at the ports may be almost as trying as any in the year, much more so than in July, August, and September, when constant rain cools the atmosphere. In Ceylon, August and September are pleasant months during the S.W. monsoon period, while December, January and February are pleasant when the prevailing winds are from the N.E. The best accommodation on the larger and fastest steamers, and especially on the P. & O. boats, is usually booked months ahead—outwards between 15th October and 1st December and homewards for March and April ; and this fact must be borne in mind by intending travellers to India. Return tickets at reduced rates are issued during the passenger off-season—from the beginning of December until the end of February, by the P. & O. Co., the Orient Line (to Colombo), the Bibby Line (Burma), and the Messageries Maritimes (to Colombo). Enquiry should be made of passenger agencies, or at the offices of the steamship companies.¹ For further hints regarding the voyage, see pp. xx, xxxi ; air route, p. xxix.

LANGUAGE

Among the difficulties which have disappeared of late years is that of the language. English is now spoken at all hotels and railway stations, and in all post and telegraph offices ; and the leading shops in all large places have attendants who speak English. The same facilities usually exist in shops for the sale of works of Indian art and manufacture which travellers are likely to visit ; and

¹ Offices of P. & O. Co. (and British India), 14 Cockspur Street, S.W. 1 ; Orient Line, 5 Fenchurch Avenue, E.C. 3 ; Bibby Line, 10 Mincing Lane, E.C. 3 ; Messageries Maritimes, 62 Pall Mall, S.W. 1, and 72 Fenchurch Street, E.C. 3 ; Offices of Thomas Cook & Son, Berkeley Street, Piccadilly, W. 1, and branches ; Grindlay & Co., 54 Parliament Street, S.W. 1 ; Cox & King, 13 Regent Street, S.W. 1 ; American Express Company, 25 Haymarket, S.W. 1.

local guides with a knowledge of English, more or less imperfect, are available at all important centres. Visitors will also find that a great many of the educated Indians whom they will meet speak the language exceedingly well. A courteous request for information will almost invariably meet with a willing response.

EXPENSES

Hotel charges have increased considerably in recent years. In the Presidency towns and Delhi during the cold weather terms range from Rs.15 to Rs.25 per day: outside these places they range from Rs.8 to Rs.15. It is customary also to give a small gratuity to the water-carrier (*bhisti*) and the sweeper. As walking in the heat of the day is better avoided even in the cold weather, carriages have to be used generally in order to visit the objects of interest. The charge for a day varies from 6 to 9 rupees. Taxi-cabs and motors can be hired at most of the principal places. At private houses it is usual to give a present to the head servant on behalf of all the attendants. The railway charges are usually 2 annas per mile for 1st class, half that sum for 2nd class, and $\frac{1}{2}$ anna per mile for servants in the 3rd class. As elsewhere in the world, the traveller will have to supply himself constantly with a sufficiency of small change—1, 2, 4, and 8 anna pieces.

MOTORING

The use of motor-cars is becoming very general in India and Ceylon, and the roads in all large places and the main roads connecting these will ordinarily be found good. Expeditions to places of interest, which previously could only be made by country conveyances, can now in many cases be carried out easily and rapidly in motors, though at greater cost. The *Bombay Presidency Motor Guide* (Rs.10), the *Western India Automobile Association Handbook and Motor Guide* (Rs.5), the *Automobile Association, Bengal, Motor Guide and Handbook* (for North-East India) (Rs.5), are all full of useful information. There are the following Automobile Associations, the Secretaries of which will gladly give any information possible to visitors: (1) Western India A.A., 32 Nicol Road, Ballard Estate, Bombay; (2) A.A. of Bengal, 87A Park Street, Calcutta; (3) South Indian Motor Union, 11-12 First Line Beach, Madras; (4) Motorists' Association, Ranchi; (5) Burma Motor Association, Rangoon; (6) Kadur & Hassan Motor Association, Mudgere, Mysore State; (7) Motorists' Association, Ootacamund; (8) Ceylon Automobile Club, Chamber of Commerce Buildings, Colombo. Nos. (1), (2), (3), (5) and (6) are affiliated to, and act as

representatives of, the Royal Automobile Club, London. Members of the Automobile Association, London, will receive advice and assistance from the A.A. Representatives,—Mr J. R. Badham, Motor Union Insurance Company, Esplanade Road, Bombay; and the Manager, Motor Union Insurance Company, 101 Clive Street, Calcutta.

The Customs duty is 20 per cent. *ad valorem*: if the car is re-exported within two years, a refund of 7/8ths of the amount deposited is returnable. A car should be registered (Rs. 16) with an Indian number, and a driving licence (Rs. 10), obtained without delay at the Chief Police Station of the Port of arrival. In addition to fees for registration and driving, a local tax (Rs. 20-35) has to be paid before a car can be used. The location of garages and petrol stores should be carefully noted. Petrol is available in the Presidency towns and at all the principal towns up country.

Maps on various scales (the 4 miles to the inch giving all necessary detail) are available from the Map Record and Issue Office, Survey of India, Calcutta; but it is probably best, before purchase, to obtain local advice as to which will be the most suitable for the particular purpose in view.

The main roads are, as a rule, excellent from December to March. In many places rivers are unbridged, but are passable during the above months by fords and in some cases ferries. A car with a good clearance is therefore a desideratum. It is possible nowadays to motor from Bombay to Calcutta by road—a distance of some 1400 to 1500 miles, and the tour (Bombay, Nasik, Kurumpura, Shajapur, Sipri, Cawnpore, Allahabad, Benares, Barhi, Burdwan, Calcutta) can be lengthened or shortened indefinitely to suit the time available. Sola Topis and smoked glasses are essential even in the cold weather. The same hints regarding bedding, supplies, and Indian servants apply, of course, to motor travelling as to travelling generally in India.

Bombay.—For landing and getting ready for the road, Rs. 100 should be allowed. Bombay is the best place to land for a tour through Northern India, as the roads are good, and arrangements for petrol, etc., are easily made. The Automobile Company, Queen's Road, will arrange to land and prepare cars so that all may be ready when the owner arrives. The Company should be addressed well in advance, and given the particulars of the proposed tour, and they will make all arrangements for supplies of petrol, etc. etc., *en route*.

Calcutta.—Landing, etc., and duty as above. The Russa Engineering Works, Mission Row, or G. Mackenzie & Co., 208 Lower Circular Road, will land cars as above and make all the necessary arrangements.

CLIMATE AND CLOTHING

For the voyage a few warm clothes for the Northern part and thin clothes for the Red Sea and Arabian Sea are required ; otherwise ordinary English summer clothing will suffice.

As regards the lighter clothes, a man will find it convenient to have a very thin suit of tweed or grey flannel for day and a thin dress jacket for dinner. (It is customary to dress for dinner on British mail steamers.) A lady will need dresses of washing silk, voile, or cotton material for daily wear, and one or two evening dresses of thin texture for the Red Sea, where the heat is often great. A coat or wrap should be kept handy for day and evening wear. White shoes with rubber soles are best for deck wear by men, and ladies will find rubber-soled shoes useful for deck games.

As the amount of luggage which can be taken into the traveller's cabin is limited, a careful arrangement beforehand of articles needed for different parts of the voyage is of considerable importance for comfort, the baggage being labelled "cabin," "wanted on voyage," and "not wanted on voyage," as the case may be. The cabin luggage should contain sufficient underwear and clothing for slightly longer than the whole voyage—otherwise the passenger may be inconvenienced on arrival. A bag, with a lock, for soiled linen should not be omitted, and a cabin "companion" for holding toilet articles will also be found useful. On the best steamers there are frequent "baggage days," when passengers can have access to articles labelled "wanted on voyage." A good and strong deck chair is essential to comfort on board : the long cane chairs are more comfortable than the ordinary folding canvas chair, but are unwieldy ; the Roorkee pattern canvas arm-chair (which packs in a bag) will be found useful, comfortable and portable. A cushion will be useful on the voyage and for railway travelling.

For a winter tour in the plains of North and Central India generally, and in Upper Burma, a traveller requires such clothing as he would wear in the late spring or autumn in England, but in addition he must take warm winter wraps. A man should have a light overcoat, in which he can ride, and a warmer overcoat or travelling ulster for night journeys or the early morning. A lady, besides a light warm coat or "sports" coat, should have a loose warm wrap coat to wear on long drives before the sun rises or after it sets, and a dressing-gown for night journeys by rail ; a dust cloak is also useful. Visitors to India must remember that while the mid-day is always warm, sometimes very hot, the evening dews may be so heavy as to wet the outer garment. Also, the cold of the nights and



mornings is often very sharp, so that the secret of dressing is to begin the day in things that can be thrown off as the heat increases, and can be resumed as the cold returns. In some places in North India in the winter months the temperature will fall between 40° to 50° within the two hours on either side of sunset, and the risks of serious chills in consequence of such sudden changes are very great, if due care is not taken to meet them. It has often been said that more illness is contracted from chills in India than from the heat. Real winter clothing will be necessary if it is intended to visit any **hill-station**. Woollen underclothing and sleeping garments, and a flannel "kamarband" (a belt of flannel 8 in. to 12 in. wide, worn round the waist), are strongly recommended for wear at all times.

Throughout the **South¹ of the peninsula**, and at times even in Bombay and Calcutta, much thinner clothing is required. Cool silk or cotton suits for men, and very thin dresses for ladies, as also khaki riding- and shooting-suits, can be got cheaper and better in India than in England, and a local tailor will make a very satisfactory suit from an English pattern.

Arrangements for washing clothes can be made at most halting places.

The hospitality of India involves a considerable amount of dining out, and therefore a lady, unless she intends to eschew society, should be provided with several evening dresses. If it is intended to join friends in camp, or make any long expeditions by road, riding-breeches and gaiters for men, and riding-habits for ladies, should not be forgotten.

A good sun-hat is an essential. It should have a brim that will protect the temples and back of the neck, at the top of the spine, and should be well-ventilated all round. Many London hatters have a large choice of sun-hats and helmets, for ladies as well as men; and travellers should be careful to wear such head protection whenever they are exposed to the sun during the voyage. A shape known as the Curzon is commonly worn, and is suitable for all ordinary purposes, but for shooting or camping it is desirable to purchase in India a larger pith hat giving more complete protection. A lady will find a light-coloured felt hat most useful, as it gives more protection from the sun than a straw hat, upon occasions when a sun-hat is not required. A sun umbrella for daily use and a parasol (which should not be too thin) should not be forgotten. Every traveller should also be provided with sunglasses.

A traveller in **Ceylon** will seldom require any but the lightest of clothing, except in the mountains, where the temperature becomes

¹ This may be taken as applying to all places South of Hyderabad, in the Deccan, excluding the higher plateau of Mysore.

proportionately cooler as he ascends. At Kandy a light overcoat, and at Nuwara Eliya warm wraps and underclothing are necessary.

For further hints, Dr Harford's *Hints on Outfit in Tropical Countries* (Royal Geographical Society) may be consulted.

BEDDING

Every traveller who contemplates a tour must, on arrival in India, provide himself with some bedding, to be taken with him everywhere ; it should always be with him in the railway carriage if he is going to spend a night in the train, which in N. India may sometimes be bitterly cold. The minimum equipment is a pillow and two cotton-wadded quilts (*razais*), one to sleep on, and one, which should be larger, as a coverlet ; or a good *razai* and a couple of warm blankets, or, still better, an eider-down. To these should be added a pillow-case, cheap cotton sheets, and a light blanket. These can be packed conveniently in an ordinary holdall. A waterproof sheet is a useful addition to the bedding, but cannot be called an absolute necessity for an ordinary tour. A more complete equipment can be purchased, consisting of a light narrow mattress, pillow, blankets and sheets, the whole arranged to roll up inside a waterproof canvas covering, secured by straps. Soap and towels, for use on railway journeys, should also be added to the above outfit.

TRAVELLING SERVANTS

A travelling servant who can speak English is almost indispensable, but should not be engaged except through friends resident in India or on the recommendation of a trustworthy Agent. Such a servant is almost necessary to wait on his master at hotels, where, without him, he may be but poorly served ; and will be found very useful in a hundred different ways when travelling by rail or otherwise, and as an interpreter. Having ascertained beforehand, from his Agents or friends, the fair wages which such a servant ought to be paid (probably not less than Rs.35 a month, plus 8 annas a day as food allowance), the master should come to a definite arrangement with him before engaging him ; and it is usually advisable to have an agreement with him in writing. A settlement of all expenses incurred should be made at least weekly. If the traveller has friends "up country," it may be well to write beforehand and ask them to engage a servant, and send him to meet his master at the port of arrival. "Up-country" servants are often cheaper and more trustworthy than those to be met with on the coast, but their knowledge of English is not generally very good. Ladies may travel

with an accredited man-servant without hesitation, and will find him far more useful than an *dyāh* in almost all respects. The services of a good *dyāh* are more difficult to secure than those of a *bearer* servant, and naturally are more expensive. The best *dyāhs* with a knowledge of English come from Madras. During the first two or three days of his service it should be carefully explained to the travelling servant exactly what he is expected to do, and it will usually be found that he will thereafter do this satisfactorily. If the servant proves satisfactory, it is the custom to make him a parting present.

TOURS

No attempt has been made to indicate tours in India, Burma or Ceylon, as these must depend so much upon the tastes and interests of individuals. The list of routes given on pp. xiii-xv will, it is believed, enable travellers readily to form for themselves any tours they may wish to make; and all further details can be obtained from the London office of the Indian State Railways (14 Cockspur Street, S.W.1), from Messrs Thomas Cook & Son, who have Eastern branch offices at Bombay, Calcutta, Delhi, Rangoon and Colombo, or from other Agencies.

INDIAN RAILWAYS

Each railway system publishes its own time-table; and many railways have excellent illustrated guides. The *Indian A.B.C. Guide*, and Newman's *Indian Bradshaw*, with maps, railway routes in India, and general information of steamer routes, are convenient for general purposes. Even if Agents are consulted for routes and arrangements for journeys, it will be desirable to obtain a Railway Guide-book: as the times of trains are liable to alteration, those given in the *Handbook* cannot be guaranteed as permanently correct. For railway purposes the hours are counted from midnight up to 24, as in Italy: thus 20.12 is 8.12 P.M., and so on. Railway time throughout India and Ceylon is Standard time, which is $5\frac{1}{2}$ hours in advance of Greenwich time.

The difference with regard to the local times in India should be borne in mind. Standard time is 39 minutes in advance of Bombay, 9 minutes in advance of Madras, 2 minutes in advance of Allahabad, 21 minutes in advance of Delhi, 62 minutes in advance of Karachi, and 33 minutes in advance of Lahore. It is 24 minutes behind Calcutta, and 37 minutes behind Chittagong.

In Burma standard time is $6\frac{1}{2}$ hours in advance of Greenwich, or 5 minutes in advance of Rangoon time. Colombo time is $5\frac{1}{2}$ hours in advance of Greenwich.

At many of the larger towns there are two or more stations. Where there are both, the traveller should, as a rule, book, not to the "City," but to the "Cantonment" station ; but before booking he should note which station is mentioned in the *Handbook*. The Railway Companies in India are doing much for the comfort of all classes of travellers. In the 1st and 2nd class compartments the seats, which are unusually deep, are so arranged as to form couches at night, but bedding and pillows are not furnished. Each compartment is provided with a lavatory. At all terminal stations, and at various large roadside stations, berths in the carriages can be booked beforehand. It will generally be found convenient to send a servant ahead to the station with the luggage, so that he may book it ; if tickets have not been taken beforehand, a slip with the destination of the traveller written on it should be given to the servant to obviate mistakes. The payment of coolies (porters—usually 1 to 2 annas) is best left to a servant.

Special tourist cars, including kitchen and servants' accommodation, are available for parties on the principal railways, full particulars of which can be found in their respective time-tables.

There are refreshment rooms at frequent intervals, and some of them are well managed and supplied ; travellers intending to make use of them should signify their intention to the guard of the train beforehand, and he will telegraph (free of charge) to the station indicated ; in South India and Burma tickets for meals are purchased at the same time as the railway ticket. Mail trains usually carry ice and aerated waters for sale. Restaurant cars now run on most of the express mail trains.

The Station-masters are particularly civil and obliging, and will, where possible, arrange for ponies, conveyances, or accommodation at out-of-the-way stations, if notice is given them beforehand ; they will also receive letters addressed to their care, which is often a convenience to travellers.

Heavy baggage can be registered : usual free allowance, 120 lb. 1st class, 60 lb. 2nd class. Travellers must be careful to see that their heavy luggage is secured by locks and is booked to proceed by the same route as themselves ; all small articles in the carriages should be carefully placed out of the reach of possible thieves in the night, especially if the windows are kept open on account of the heat. At every station which the ordinary traveller is likely to visit conveyances of some sort await the arrival of the trains. When travellers leave their carriages in order to go for meals to the refreshment rooms, a servant or a station coolie should be placed formally in charge of the traveller's property. For a small sum—an anna or two—the coolie can be trusted to guard it.

HOTELS, DAK BUNGALOWS, AND REST-HOUSES

Hotel accommodation in India has undoubtedly improved since Sir William Howard Russell, the famous war correspondent, wrote in 1860 that "A hotel in India up country is a place where you can get everything that you bring with you and nothing else except a bed and soda-water" (*My Diary in India*, Vol. I. p. 148). There are first-class hotels in Northern India at such places as Delhi, Agra, Lahore, Simla and Rawalpindi, notably those which are under the management of the Associated Hotels Company : and the hotels of Messrs Spencer & Co. of Madras at Bangalore, Goa (Mormugão) and Madras, can be recommended. But, speaking quite generally, there are hardly any hotels in India which come up to European standards outside the three Presidency towns, the chief hill stations and certain exceptional places. Fairly large airy rooms will be found in the principal hotels, but the traveller will hardly be well waited upon unless he brings a servant with him. As they are often crowded in the tourist season he should give notice beforehand of his intended arrival. Some of the European Clubs admit recommended visitors as honorary members, and a Club which has sleeping accommodation is generally more comfortable than a hotel ; but it is seldom that such accommodation is available in the cold weather, unless it is arranged for by a friend beforehand. All property should be kept carefully locked in hotels, as there are usually many strange servants in them, and the verandas of most are frequented by hawkers and other outsiders.

At the Dak Bungalows (Travellers' Rest-houses established by Government in all important places) the keeper in charge (commonly called the *khánsáma*) will provide meals, but it is well to give notice of an intended arrival. The bedrooms in these bungalows have an adjoining bathroom and are usually sufficiently, if roughly, provided with furniture and lights. They cannot be retained beforehand—the first comer having the preference ; and after occupying a room for twenty-four hours the traveller must give place, if required, to the next comer. In S. India the name Travellers' Rest-house is generally used. There is a fixed fee for the occupation of the rooms, and usually for each of the simple meals to be supplied. In some cases the *khánsáma* has been in the service of English officers, and will prove to be a sufficiently good cook. In small and out-of-the-way places it is best to confine his efforts to a curry or *pilau*, which he is sure to prepare well ; and when visiting such places a traveller will do well to take with him small supplies—such as tinned soups and vegetables, tea and sugar, biscuits and the like, and his own whisky or wine.

There are many places well worth visiting, though somewhat off the beaten track, where some kind of Rest-House is available, but no arrangements have been made for supplying food ; and in other places only an official Inspection bungalow is available to those who obtain special permission beforehand (it is not always obtainable), and in any case servants and food have to be taken. Details are given in the body of the text. At some railway stations sleeping-rooms for travellers are provided, or waiting-rooms can be utilised in emergent cases, though the Railway Companies warn the public against using them as Dak Bungalows. Before organising trips to less-frequented localities, inquiries should be made, and the traveller should be provided against emergencies. In villages it is generally possible to obtain such supplies as eggs, fowls, milk, and the local grain, through the station-master or village-headman, but the people will not lend their drinking or other vessels to Europeans. Village milk or water should NEVER be drunk until it has been thoroughly boiled.

The Rest-House of Ceylon is more like a hotel than the Dak Bungalow in India, in that it is more frequently furnished with bedding and linen, and food is generally provided.

FOOD

The traveller will, of course, realise that he must not expect the quality of meat, fowls and eggs to be always up to the standard of a more temperate climate. The sea fish at the sea-ports is excellent, and the river fish supplied at table elsewhere is generally fresh ; but it does not always agree with persons new to the country, and not even in the case of the *mahsir* does it always commend itself as palatable to them. Game is generally abundant in the cold weather—quail (early and late in the season), snipe, teal, duck, partridge, and sandgrouse. Where there is a good supply of fruit in the market, its proper provision at the hotel table should be insisted upon. Bread is fairly good, but this cannot be said of the butter, and milk is not free from danger. It is a necessary precaution always to have the milk boiled, even though the boiling affects its taste. Aerated water should be drunk in preference to plain water ; and the water in hotels and refreshment-rooms should be absolutely avoided. If the traveller leaves the beaten track, he should have a tiffin (luncheon) basket, containing knives, forks, and other simple fittings and supplies ; and, indeed, whenever any long journey is undertaken, it is well to be provided with such a basket of potted meats, soups or bovril, biscuits, jam, tea and sugar, some spirit, and soda-water, which is good and cheap in India (to be obtained only

from proper manufacturers, not from itinerant vendors at railway stations). A spirit-lamp will be found a great convenience. Some simple apparatus for making tea should be taken whenever possible, including railway journeys, with milk, boiled, or bottled, from some safe source of supply. Ice in an ice-box, with sawdust, should be taken, especially in the hot weather.

HEALTH

It is of great importance, as intimated above, to avoid chills in the East, and damp underclothing should always be changed directly after the body has been overheated. The necessity of using warm clothing until the morning has ceased to be cold, and after the sun has set, or even slightly before the sun sets, has been insisted on above. Excessive bodily exertion and consequent fatigue should be avoided by all who are no longer young, and such persons, if unacquainted with the conditions of subtropical life, will do well to consult some medical man experienced in them before undertaking a tour in India. Slight indisposition must not be trifled with in India, even though it would be thought nothing of elsewhere; immediate avoidance of all fatigue is necessary upon the occurrence of any indisposition, and only light food should be taken until it passes away. In cases of fever, or of any ailment with the treatment of which the traveller is not practically acquainted, no time should be lost in seeking the services of a qualified medical man. Such an officer will be found in the Civil Surgeon of all places of any size; private practitioners are usually to be found only in the large towns. The ordinary fee for attendance is Rs.16.

SPORT

No attempt can be made here to give definite advice to sportsmen, but sporting localities have been incidentally indicated in the routes. A number of useful books on sport in India can be bought from the principal booksellers in the larger towns. The equipment for these pursuits varies from day to day, and each man must best know his own wants. Firearms are subject to a heavy duty when brought into the country, see p. 7. Large-game shooting is expensive and takes time; it should not be attempted except in company with a really good *shikari* and with the assistance of persons of local authority, as otherwise it would probably involve a mere waste of time and useless trial of patience.

Small-game shooting—*i.e.*, wild fowl, hare, etc., with an occasional shot at an antelope—is an easier matter, and will afford excellent sport. It can be got from November till February, often at very

small cost, by spending a night or two at some wayside railway station or near some remote spot. In this case also the advice of local sportsmen will be of the greatest assistance. Near Cantonments the ground is always too much shot over to afford good sport.

HINTS FOR CAMPING

Travellers who leave the beaten track with the intention of shooting, or for the purpose of visiting remote or ruined cities, should take a small tent or two with them. Transport in the shape of camels, carts, baggage-ponies, or bearers, can usually be got in any district headquarters, and in the larger places riding-ponies and light carts, or perhaps even European traps for driving, can be obtained. Those who intend to go into camp (as the Anglo-Indian term runs) will probably be experienced in organising such expeditions, or will have friends who will make arrangements for them, and, in any case, a courteous request for assistance made by calling upon the principal English or Indian officer of the place is sure to meet with courteous consideration ; but perhaps the following suggestions of requirements may prove of some use in the case of a solitary traveller who does not mind a certain amount of roughing. In Kashmir camp equipment as below can be hired from the Agents there—elsewhere it would have to be purchased.

Tent (Cabul tent, 80 lb. complete) for self, and, if the weather is cold or likely to be wet, a *pal* tent for servants ; a few iron tent pegs (wooden ones for soft ground) ; and a mallet. Camp-bed with side poles of one piece, table, chairs, and carpet. India-rubber flat bath, and a board to stand on, or tubbing can be done by pouring pots of water over the head (fresh pots can be purchased at any village), a screen (*kanūt*) to use as a bath-room, a washing-basin (*chilamchi*) and stand, hooks to strap on tent-pole for hanging clothes on, etc. ; aluminium cooking-pots, and fry-pan, an iron dish or two, a few knives, forks, and spoons, aluminium plates, cups, and saucers, and mustard, pepper and salt pots. Servants required in camp are—a man or boy to wait, a cook, a water-carrier (*bhisti*), a sweeper, and grooms for horses. All food for the traveller, except milk and fresh meat, must be taken with him. Food for servants, milk, and meat (goat or sheep or chickens), can be got in any but the poorest villages. For bedding and clothes take blankets, sheets (luxury), an Indian shooting-suit, rough boots and gaiters, a light flannel suit or two, a large sun-hat for shooting in, a second sun-hat and a cap for wear in the evening. A mosquito-net and poles will be needed.

If white ants are about, boxes and carpets should be shifted

every morning. The ravages these and other insects can commit are rapid and extensive. Persons not accustomed to camping out should always have straw put on the ground under the tent carpet.

For arms—the plainer the better—1 central fire D.B. hammer 12-bore gun, 1 C.F.D.B. express rifle, 500 bore. Empty 12-bore cartridges, powder, and shot of all kinds can be purchased.

For medicine, plenty of quinine in 3- or 5-grain “tabloids” or pills (to be taken before or after food whenever a chill or feverishness is felt), some aspirin, some aperient, some chlorodyne, and some ammonia for mosquito bites.

BOOKS

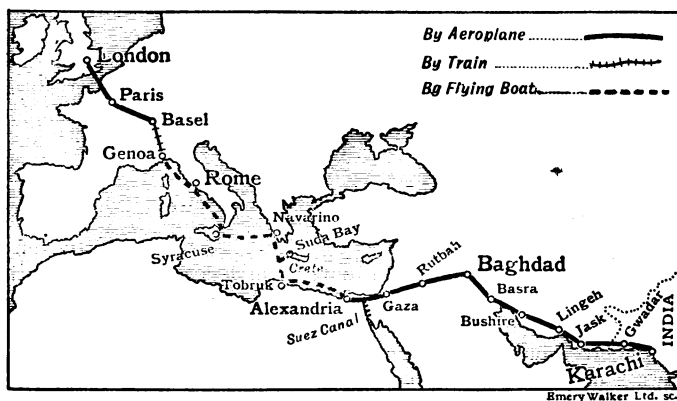
The literature on India is enormous. No single list can satisfy all tastes. Books for special subjects or places, and for Burma, Kashmir and Ceylon have been quoted in the body of the Handbook.

(2) AIR ROUTE TO INDIA

With effect from 30th March 1929, a weekly air-mail service from London (Croydon Aerodrome) to Karachi has come into operation. As the arrangements are still in the experimental stage, the accuracy of the details which follow cannot be guaranteed, and intending passengers should obtain the latest information from Imperial Airways, Limited, Airways House, Charles Street, Lower Regent Street, London, S.W. 1. According to the announcements which have been made, the journey will be accomplished in seven days; but it is expected that the period will be shortened, when sufficient experience has been gained and equipment for night flying is available. Inasmuch as the ground organisation of the section from Basra to India is still incomplete, in so far as rest-houses and arrangements for food are concerned, no regular booking of passengers beyond Basra is, at present, contemplated; but male passengers may be accepted for the through journey, on the understanding that the arrangements for their comfort beyond Basra are improvised and temporary. Moreover, until Imperial Airways are in a position to form an opinion of the average passenger and mail load, the number of passengers for through booking from London to Karachi is limited to six. Fares have provisionally been fixed as follows: From London to Karachi, £130; from London to Alexandria, £58; from Alexandria to Karachi, £72.

The route will be divided into three main sections. It is proposed that the departures from the Croydon Aerodrome shall take place

every Saturday morning, and that the arrival at Karachi shall be on the following Saturday morning. On the return journey, Karachi will be left on Sunday morning, and the Croydon Aerodrome reached on the Sunday morning following. The first section of the journey—from London to Basel (Birsfelden) will be by air, and will be undertaken by aeroplanes of the super-Argosy type, with accommodation for 20 passengers. From Basel (Central Railway Station) the journey will be continued to Genoa by train. At Genoa the flight will be resumed in short "Calcutta" flying-boats, with three Jupiter engines of 1455 horse-power; and at Alexandria connection will be made with the present Cairo-Basra service, which is being extended along the Persian Gulf to Karachi. Pending the construction of the com-



bined land and sea aerodrome near Alexandria, passengers will be conveyed by motor-car from Alexandria to Aboukir, where the D.H. 66 aeroplanes operating between Cairo and Basra will be picked up.

The route from Aboukir is by way of Gaza, Rutbah, Bagdad (west), Basra, Bushire, Lingeh, Jask and Karachi. The total distance, including the rail journey of 326 m. from Basel to Genoa, is 5176 m. (London-Bagdad, 3484 m.; Bagdad-Karachi, 1692 m.). The Government of India have invited tenders for a regular air service between Karachi and Delhi, and also between Delhi and Calcutta. Until this is in operation the journey from Karachi to Delhi must be made by rail, *via* Hyderabad (Sind) and Luni Junction (see post, p. 214). If Bombay is the objective, the steamer of the British India Steam Navigation Company, which run between Karachi and Bombay, must be used.

The following air-routes across India have been officially approved. The route from Karachi to Calcutta is *via* Hyderabad (Sind), 90

statute miles ; Utarlai (200 m.), a railway station on the line from Hyderabad (Sind) to Luni Junction, Jodhpur (110 m.), Nasirabad (105 m.), Jhansi (240 m.), Allahabad (200 m.), Gaya (205 m.), Asansol (145 m.), and Calcutta (115 m.), making a total mileage of 1410 miles ; but the grounds at Gaya and Asansol are not yet available. From Karachi to Delhi and thence to Calcutta (1575 m.), the route is the same as far as Nasirabad ; thence to Delhi (225 m.), Agra (110 m.), Cawnpore (150 m.), Allahabad (120 m.), Gaya (205 m.), Asansol (145 m.) and Calcutta (115 m.). The air-route from Karachi to Bombay (770 m.) proceeds *viâ* Utarlai to Ahmadabad (200 m.) and Bombay (280 m.).

(3) VOYAGE FROM ENGLAND TO GIBRALTAR, MARSEILLES, MALTA, PORT SAID, THROUGH THE SUEZ CANAL AND RED SEA TO ADEN AND BOMBAY

The principal steamer Lines running from England to India are the P. & O. and British India Companies from London, and the Ellerman (City and Hall) Lines from Liverpool to Bombay, Karachi, Colombo, Madras, and Calcutta ; the Anchor Line from Liverpool to Bombay and Karachi ; the Lloyd Triestino from Trieste, Venice, and Brindisi, and the Marittima Italiana from Genoa and Naples to Bombay ; the Bibby and Henderson Lines from Liverpool to Rangoon ; the Orient, Nippon Yusen Kaisha, and Aberdeen and Commonwealth Line from London, the Rotterdam Lloyd, and the Nederland Line from Southampton, the Bibby Line from Liverpool and the Messageries Maritimes, and the Chargeurs Reunis from Marseilles at regular intervals for Colombo. For a table of comparative rates of steamer fares, see p. xlviii.

The comfort of the voyage depends much on the choice of the steamer, and the cabin. In going through the Red Sea to India the outer cabins on the port side are the best. On the return voyage the starboard cabins are better, but the difference is not material.

On going on board it is well to arrange for a seat at table as soon as possible. Seats are usually allotted by the chief steward.

It is usual to give a present of £1 to the cabin steward, and 10s. to the waiter at table. On the steamers of the P. & O. and British India Companies passengers are entitled to medical attendance by the ship's surgeon, at a fixed charge of 5s. per visit for 1st, and 2s. 6d. per visit for 2nd class passengers.

Gibraltar is usually reached by the P. & O. mail steamers in 4 days

after leaving London, and Marseilles in 6 days : but the journey can be shortened by taking the P. & O. express which leaves Victoria Station every Thursday (23 hours to Marseilles). Port Said is reached in $4\frac{1}{4}$ days from Marseilles, Aden in $8\frac{1}{2}$ days, and Bombay in $13\frac{3}{4}$ days.

The time occupied from London by the P. & O. and British India steamers running to Calcutta, and the P. & O. steamers to China and Japan, is usually : Malta, 7 to 8 days ; Aden, 17 days ; Calcutta, 31 days ; Port Said, 10 to 11 days ; Colombo, 21 to 25 days.

The P. & O. mail steamers start from the Tilbury Dock, and the intermediate steamers from the Royal Albert Docks, London. The Messageries boats sail from Marseilles, where also the steamers of the P. & O., Bibby, Nippon Yusen Kaisha, and Rotterdam Lloyd call. The Orient Line steamers call at Toulon and Naples, and those of the Nederland Line at Genoa. Cook's *India, Burma and Ceylon : Information for Travellers*, is a useful compendium.

Travelling by sea from England, through the Bay of Biscay, results in a saving of a few pounds as compared with the expense of the overland route *via* Marseilles, although it adds a few days to the voyage ; good sailors may prefer the greater quiet of sea life to the scurry of a long overland journey. The first place sighted is generally **Cape la Hague**, or **Hogue**, on the W. coast of the Cotentin, in France, off which, on the 19th of May 1692, Admiral Russell, afterwards Earl of Orford, defeated De Tourville, and sunk or burned sixteen French men-of-war. Then **Cape Finisterre** (*finis terræ*), a promontory on the W. Coast of Galicia, in Spain, and in N. lat. $42^{\circ} 54'$, and W. long. $9^{\circ} 20'$, will probably be seen, off which Anson defeated the French fleet in 1747. The next land sighted will be, perhaps, **Cape Roca**, near Lisbon, and then **Cape St Vincent**, in N. lat. $37^{\circ} 3'$, W. long. $8^{\circ} 59'$, at the S.W. corner of the Portuguese province Algarve, off which Sir G. Rodney, on the 16th January 1780, defeated the Spanish fleet, and Sir J. Jervis won his Earldom on the 14th of February 1797, and Nelson the Order of the Bath, after taking the *S. Josef* and the *S. Nicholas*, of 112 guns each. This Cape has a fort upon it, and the white cliffs, 150 feet high, are honey-combed by the waves, which break with great violence upon them. From the last three Capes steamers are signalled to Lloyd's. Just before entering the Straits of Gibraltar, **Cape Trafalgar**¹ will also probably be seen in N. lat. $36^{\circ} 9'$, W. long. $6^{\circ} 1'$, immortalised by Nelson's victory of the 21st of October 1805. **Tarifa** is next passed, and **Gibraltar** then comes in sight. The following table of distances is from the pocket-book of the Peninsular and Oriental Steam Navigation Company. This little book can be highly recommended.

¹ Tarf-al-gharb, the side of the West.

TABLE OF DISTANCES BETWEEN THE VARIOUS PORTS ACCORDING TO THE ROUTES TAKEN BY THE STEAMERS OF THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

London (if <i>viâ Plymouth</i> add 50)										
<i>Viâ Malta</i>	295	Plymouth								
	1309	1054	Gibraltar							
	2003	1748	694	Marseilles						
	2290	2035	981	641	Malta					
	<i>Viâ Marseilles</i>									
	3225	3511	3256	2202	1508	935	Port Said			
4620	4906	4651	3597	2903	2330	1395	Aden			
6284	6570	6315	5261	4567	3994	3059	1664	Bombay		
6713	6999	6744	5690	4996	4423	3488	2093	875	Colombo	
7973	8259	8004	6950	6256	5683	4748	3353	2135	1260	Calcutta

GIBRALTAR.—As the steamers rarely stop for more than a few hours, passengers will not find time for anything beyond a walk in the town and lower fortifications. The place is a good one to buy tobacco, as there is no duty. There are steamers from Gibraltar three times a week to Tangier, and a number of times daily to Algeciras (Al-jazira, the peninsula or island), the terminus of the Spanish railway.

Gibraltar was reckoned as one of the Pillars of Hercules, the African pillar being Abyla, near Ceuta. It was taken from the Visigoths in 711 A.D. by Tarik Ibn Zayad—after whom it was called Jab-al Tarik = Gibraltar—and retaken 1309, but not finally wrested from the Moors till 1503. In 1704 it was taken by the English, and sustained several sharp sieges by the French and Spaniards between that date and 1779. In the latter year commenced the memorable siege which lasted four years, and ended by the repulse of the combined fleets of France and Spain by the garrison under General Eliott, Lord Heathfield of Gibraltar, 1779-83. Since that time it has remained an uncontested possession of the English. The area of the rock is $1\frac{7}{8}$ sq. m. and the pop. (1921) 20,638: civil, 17,160; naval, 546; military, 2932.

As the steamer rounds Point Carnero, the spacious, but exposed bay, 6 m. wide and 10 m. deep, is entered, and a fine view is obtained of the vast rocky promontory, which on the N. face rises in a perpendicular precipice 1200 ft. high, and ascends in the centre to 1408 ft. It is 3 m. in length, and from $\frac{1}{2}$ m. to $\frac{3}{4}$ m. in breadth; and is joined to the mainland by a low, sandy isthmus, $1\frac{1}{2}$ m. in length. On all sides but the W. it is steep and rugged, but on that side there is a slope of from 200 to 300 ft. from the rock down to the sea. The approach from the W. reveals three high points—N. is the

Rock Gun, or **Wolf's Crag**, 1337 ft. ; in the centre the **Upper Signal Station**, or **El Hacho**, 1255 ft. high ; and S. is **O'Hara's Tower**, 1408 ft. Here the rock descends to **Windmill Hill Flats**, a level plateau $\frac{1}{2}$ m. long, which ends in a still lower plateau from 100 to 50 ft. above the sea, called **Europa Flats**. The new mole, landing-place, and dockyard, occupy the west side from opposite O'Hara's Tower to the Signal Station, and the town lies above them from opposite the latter point to the Rock Gun Peak.

The hotels (*Bristol, Grand, Cecil*) are situated in West Port Street, which, with its continuations, forms the main thoroughfare of the place from the **Land Port** to the **South Port Gate**. Cook's Agency and the Eastern Telegraph Office are in **Main Street**.

When passengers land at Gibraltar passports are exacted from all but British subjects, who will however find it convenient to have passports in any case when travelling abroad. Sketching is strictly prohibited. The hour of evening gun-fire varies according to the time of year ; a few minutes later all gates are shut till sunrise, though up to a later fixed hour entrance is permitted with certain police formalities.

The Main Street may be followed as far as the **Alameda**, outside the South Port ; this was the parade-ground until 1814, when Sir George Don made a lovely garden of it. A column brought from the ruins of Lepida is surmounted by a bust of the Duke of Wellington, and there is also a bust of General Eliott, the hero of the great siege 1779-83. Half-way down the street is the **Exchange**, with the **Club House** to the W. The English **Cathedral Church** of the Holy Trinity, built in the Moorish style in 1832, stands near these, and the Governor's residence farther on, which once belonged to Franciscan friars, is still called "The Convent." On the left, outside the South Port Gate, is a small cemetery, in which many who died of wounds received at the Battle of Trafalgar are buried ; and farther South, below the Alameda, is the dockyard. An upper and a lower road lead from here to the Windmill Hill and Europa Flats. Beyond these, on the E. shore, is the summer residence of the Governor, called "The Cottage," built by General Fox.

Those who stay here several days can explore the Heights and fortifications of Gibraltar, for which a special order from the Military Authorities is necessary. From the Rock Gun there is a fine view of the Ronda Mountains and the Sierra Nevada ; the **Moorish Castle** (746 A.D.) is on the way to it, and under a massive tower, called the Torre de Omenaga, are some well-constructed tanks. Beyond are the wonderful galleries in the North face excavated by convict labour. From the **Signal House** is a noble view, which

includes the Atlas Mountains, Ceuta, and Barbary, ending with the Bay of Tangier, a Morocco seaport. Between the Rock Gun and O'Hara's Tower live a few monkeys, which are jealously protected. S. of the Signal Station, and 1100 ft. above the sea, is the celebrated St Michael's Cave, which can be visited by special permission only; an entrance scarcely 6 ft. wide leads into a hall 200 ft. long and 60 ft. high, supported by stalactite pillars like Gothic arches. Beyond are smaller caves, which have been traversed to a distance of 288 ft. In Windmill Hill are the four Genista caves, where many bones of men and animals have been discovered.

Beyond the Land Port Gate is a causeway leading into Spain, with the sea on the left, and the "Inundation," a sheet of water so called, on the right. Beyond these is the North Front, where are the cemetery, the cricket-ground, and the race-course. The Eastern beach, called "Ramsgate and Margate," is the general afternoon resort. Across the isthmus is a line of English sentries, then the Neutral Ground, and then the Spanish sentries. Behind the Spanish lines is the town of La Linea de la Concepcion.

MARSEILLES (826 m. from London by railway).—Passengers to India, joining a P. & O. steamer at Marseilles, and travelling by the P. & O. express (1st class tickets, including sleeping car supplement, £13, 10s.) leave London (Victoria), on Thursday in each week, and reach Marseilles on Friday, in about 23 hrs., the special train proceeding alongside of the steamer. This is berthed at mole C., at the Western end of the new Bassin National, and some 2½ m. distant from the ordinary railway station. The Grand Hotel Terminus at the station (Gare St Charles) is a convenient place to stay at for one night, or the Grand Hotel de Louvre near the old harbour. Passengers arriving by steamer, who have some hours to spare, should, if possible, drive up the main street or Cannebière to the Museum, with a Picture Gallery and Zoological Gardens, and then from the middle of the former by the Rue de Rome and the Prado to the coast East of the city, and along that back to the Port by the Corniche, finally visiting the lofty situated church of Notre Dame de la Garde for the sake of the splendid view. The same round can be made by the electric tramways.

If passengers *viâ* Marseilles do not travel by the P. & O. express, they should leave London at latest by an earlier train on Thursday from Victoria Station for Dover, and are recommended to drive across Paris to the Gare de Lyon rather than trust to the Ceinture railway. No time should be lost in joining the steamer on arrival by the P.L.M. train at Marseilles.

MALTA.—On the way from Gibraltar to Malta, by steamers which do not proceed to Marseilles, **Algiers** may possibly be seen, its white

buildings stretching like a triangle, with its base on the sea and the apex on higher ground. **Cape Fez** and the promontory of the **Seven Capes**, jagged, irregular headlands, are passed on the starboard side, also **Cape Bon**, the most Northern point of Africa, and the Island of **Pantellaria**, the ancient Cossyra, between Cape Bon and Sicily. It is 8 m. long, volcanic, and rises to a height of more than 2000 ft. There is a town of the same name near the seashore, on the western slope, where there is much cultivation. It is used by the Italians as a penal settlement, and is rather smaller than Gozo.

The Maltese group of islands consists of **Gozo**, **Comino**, and **Malta**, and stretches from N.W. to S.E., the total distance from San Dimitri, the most W. point of Gozo, to Ras Benhisa, the most S. part of Malta, being about 25 m. From the nearest point of Gozo to Sicily is 55 m., and Africa is 187 m. distant from Malta. Malta lies in N. lat. $35^{\circ} 53' 49''$, E. long. $14^{\circ} 30' 28''$. It is 17 m. long and 8 m. broad. Its area, together with that of Gozo, is 116 sq. m., and the population of the three islands is 224,680 (1921). It consists of calcareous rock, the highest point being 590 ft. above the sea-level. Towards the S. it ends in precipitous cliffs. It has a barren appearance, but there are many fertile gardens and fields, enclosed in high walls, where fine oranges, grapes, and figs, and other crops are grown. The Maltese language is a mixture of Arabic and Italian, but most of the townspeople have sufficient knowledge of Italian to transact business in that tongue. The port of Malta is situated somewhat to the E. of the centre of the Northern shore of the island. It consists of two fine harbours, separated by the narrow promontory called **Mount Xiberras**, or Sciberras. The Western or quarantine harbour, protected by **Fort Tigne** on the W., is called **Marsamuschetto**; the other is **Valetta**, the great harbour. The entrance to the great harbour is protected on the W. by **Fort St Elmo** at the end of Sciberras, and on the E. by **Fort Ricasoli**, both very formidable. At Fort St Elmo is one of the finest lighthouses in the Mediterranean. The great harbour runs away into numerous creeks and inlets, in which are the dockyard, victualling-yard, and arsenal—all of which are commanded by the guns of **St Angelo**, which is a fort behind St Elmo; on the E. side here is the town called Citta Vittoriosa. The mail steamers are moored in the quarantine harbour; the charge for landing is sixpence per head. On landing a long flight of steps is ascended to the **Strada San Marco**, which leads to the principal street, **Strada Reale**, $\frac{1}{2}$ m. long, in the town of Valetta, so called from Jean de La Valette, Grand Master of the Knights of St John of Jerusalem, who built it after the Turkish armament sent against Malta by Sultan Soliman II. had been repulsed. The

foundation-stone was laid on the 28th of March 1566, and the whole town, designed by one architect, Girolamo Cassar, was completed in May 1571.

Left of the Strada Reale is **St. John's Cathedral**—a remarkable church, both historically and architecturally—designed by Cassar. The floor is paved with slabs bearing the arms of scores of knights who have been interred in this church. In the first chapel on the right the altar-piece represents the beheading of John the Baptist, and is by M. Angelo Caravaggio. In the next chapel, which belonged to the Portuguese, are the monuments of Manoel Pinto and Grand Master Manoel de Vilhena, the latter of bronze. The third, or Spanish chapel, has the monuments of Grand Masters Perellos and N. Cotoner, and two others. The fourth chapel belonged to the Provençals. The fifth chapel is sacred to the Virgin, and here are kept the town keys, taken from the Turks. On the left of the entrance is a bronze monument of Grand Master Marc Antonio Sondadario. The first chapel on the left is the sacristy. The second chapel belonged to the Austrians, the third to Italians, containing pictures, ascribed to Caravaggio, of St Jerome and Mary Magdalene. The fourth is the French chapel, and the fifth the Bavarian, and hence a staircase descends to the crypt, where are the sarcophagi of the first Grand Master who ruled in Malta, L'Isle Adam, de La Valette and others.

The **Governor's Palace**, formerly the Grand Master's, close to the Strada Reale, is a noble range of building, containing marble-paved corridors and staircase, and many portraits, and armed figures carrying the shields of all the Governors from the first Grand Master to the present day. The armoury is full of interesting relics, including the original deed granted to the Knights of St John of Jerusalem by Pope Pascal II. in 1126, and the deed when they left Rhodes in 1522. The **Library**, close to the Palace, contains 40,000 volumes and some Phœnician and Roman antiquities. The highest **battery** commands a fine view of both harbours and of the fortifications. There are several statues of Grand Masters and Governors in the walk on the ramparts. The **Opera House**, the **Bourse**, the **Courts of Justice**, once the Auberge d'Auvergne, and the Union Club, once the Auberge de Province, and the statues of L'Isle Adam and de La Valette, are in the Strada Reale. In front of the Auberge de Castille are the Piazza Regina and Upper Barracca, affording splendid views of the great harbour. The **Military Hospital** has the largest room in Europe, 480 ft. long, erected in 1628 by Grand Master Vasconcelos. Below the Military Hospital is the Civil **Hospital for Incurables**, founded by Caterina Scappi in 1646.

One mile beyond the Porta Reale and the station of the little rail-

way to Citta Vecchia is the Governor's country Palace of **St Antonio**, with a lovely garden. About $\frac{1}{2}$ m. farther to the S.W. is **Citta Vecchia**, which stands on a ridge from 200 to 300 ft. high, affording a view over nearly the whole island. There is a fine church here, St Paul's, and near it are some curious catacombs. **St Paul's Bay** lies at the N.W. extremity of the island; there is a statue of bronze erected on an islet at its mouth. The Carthaginian or Phœnician ruins at **Hagier Chem**, properly Hajar Kaim, "upright stone," near the village of Casal Crendi, can be visited on the way to it. These ruins, excavated in 1839, consist of walls of large stones fixed upright in the ground, forming small enclosures, connected with one another by passages, and all contained within one large enclosure. The building is thought to have been a temple of Baal and Astarte. The main entrance is on the S.S.E., and a passage leads from it into a court, on the left of which is an altar, with the semblance of a plant rudely sculptured on it. Similar remains are found in other parts of Malta and in Gozo.

Malta is said to have been occupied by the Phœnicians in 1500 B.C. and by the Greeks in 750 B.C. The Carthaginians got possession of it in 500 B.C., and the Romans took it towards the close of the Second Punic War. The Goths and Vandals invaded it in 420 A.D. In 520 A.D. Belisarius made it a province of the Byzantine Empire, the Moslems conquered it in 730 A.D., and Count Roger, the Norman, captured it in 1100 A.D. It then passed to Louis IX., to the Count of Anjou, and to the Kings of Castile, and then to Charles V., who gave it, in 1530, to the Knights Hospitallers of St John of Jerusalem. On 18th May 1565 the Turks attacked St Elmo, St Angelo, and Sanglea, but the siege was raised on the 8th of September (see Major Whitworth Porter's *History of the Knights of Malta*, Longmans 1858). The Knights had their own mint, fleet, and army, and accredited ambassadors to foreign Courts. In the archives are letters from Henry VIII., Charles II., and Anne, addressed to them as Princes. On the 7th of September 1792 the French Directory commanded the Order to be annulled, and seized all its French possessions. On the 7th of June 1798 Bonaparte arrived with a fleet of 18 ships of the line, 18 frigates, and 600 transports, and Malta was surrendered. A tree of liberty was planted before the Palace, the decorations of the knights were burned, and the churches, palaces, and charitable houses at Valetta and Citta Vecchia were pillaged. On the 2nd of September 1798 a general revolt took place, and Nelson blockaded Valetta; and on the 5th of September 1800 their commander, General Vaubois, surrendered. Since that date Malta has been a British possession with a large measure of self-government.

EGYPT, PORT SAID, AND THE SUEZ CANAL.—The land about Port Said is so low that the approach to the harbour would be difficult were it not for a lighthouse, 184 ft. high above sea-level, built of concrete, which stands a short distance inland to the right of the harbour, close to the W. mole, and shows an electric light flashing every 10 seconds and visible 20 m. off. The harbour is formed by two converging breakwaters, built of concrete blocks. The depth of water at the entrance exceeds 33 ft. Near the S. end of the West jetty is a bold statue of the illustrious founder, Ferdinand de Lesseps (1805-1894), with the motto "Aperire terram gentibus." **Port Said** town is modern, and is a very important coaling-station. The population is 103,223, of which 20,000 are Europeans (census of 1927). The Canal Company's offices form a conspicuous pile of buildings on the embankment that separates the Dock du Commerce from the Dock de l'Arsenal. Opposite the anchorage on the Marina is the French pilots' office, where the draught, breadth, length, and tonnage of each ship entering the Canal is noted. Express trains leave Port Said for Ismailia, Suez, and Cairo, taking about 4½ hours to Cairo (p. xlii). The hotels at Port Said are the Marine Exchange, Casino Palace, and Marina Palace. The P. & O. and British India Companies, Messrs Cook, the Anglo-American Nile Company and the principal Agents in India have representatives at Port Said. The offices of Messrs Thomas Cook & Son are at 15 Rue Sultan Hussein, close to the landing-stage.

The **Canal**, formally opened in November 1869, is about 100 statute m., or 86 nautical m., in length. The distance between Port Said and Ismailia by the Canal is 49 statute m., or 42 nautical m. As far as Ismailia it runs due N. and S.; it then bends to the E. for about 35 m., and is again almost straight for the last 20 m.

The following are the dimensions of the Canal, which are steadily being increased :—

Width at the water-line	480 ft. minimum
„ on the floor of the Canal, calculated at a depth of 33 ft.	148 ft. „
Depth	36 ft. „

Every few miles there is a gare, or station, and a siding with signal posts, by which the traffic is regulated according to the block system. Mail boats pass through in 12 hrs., other steamers in 15 hrs. The maximum speed authorised is 5½ nautical m. an hour, except in the large Bitter Lakes, where ships may go full speed.

During the first six months of 1928, 3230 ships passed through the Canal, as compared with 2903 and 2639 during the corresponding

period in 1927 and 1926. About 60 per cent. of the vessels are British. Tonnage dues are at the rate of 7.25 frs. per ton; and passenger transit dues at the rate of 10 frs. for each person. The share capital of the Canal Company is 200,000,000 frs. (£8,000,000). The cost of the Canal has been—up to 31st December 1925, 865,000,000 frs. The Canal route saves about two-fifths of the length of the route by the Cape of Good Hope from the principal ports of Europe to Bombay, and about one-quarter of the route to China.

On the W. of the Canal, as far as **Al Kantara** (the Bridge)—that is, for about one-fourth of the way—there is a broad expanse of water, called **Lake Manzala**, and for the rest of the distance to the W. and the whole distance to the E., a sandy desert, on which foxes, jackals, and hyenas, wander at night. 20 m. from Port Said the old Pelusiac branch of the Nile is crossed, and 8 m. to the E. are the ruins of the ancient city of Pelusium. At **Al Kantara**, 29 m. from Port Said, the Canal intersects the caravan-track between Egypt and Syria. Here the passengers on the railway from Egypt to Palestine cross the Canal by ferry; and start again from the railway station on the E. bank. The War Cemetery has 1626 graves, of which 341 are those of Australians and New Zealanders. 10 m. to the W. is **Tel Dafana**, the site of Daphne, the Taphnes of Judith, 1, 9. At 2 m. S. of Al Kantara the Canal enters the **Lake Bala**, and after 12 m. reaches the promontory **Al Fardan**, which it cuts through. Thence, after $4\frac{1}{2}$ m., it reaches **Al Gisir**, the highest ground in the isthmus, 65 ft. above sea-level. There was a great camp here when the works were in progress, and a staircase of 100 steps led down to the Canal. Beyond this, near the entrance to **Lake Timsa**, just half-way between Port Said and Suez, a small channel joins the maritime Canal and the Fresh-water Canal. The difference of level is 17 ft., which is overcome by two locks. A steam-launch comes to meet steamers in the lake, and land passengers for

ISMAILIA (named after the Khedive Ismail), which was, during the War, an important base of operations against the Turks. From the landing-place a broad road lined with trees traverses the town from E. to W. In the W. quarter are the station, the landing-quays of the Fresh-water Canal, and large blocks of warehouses, and beyond them the Arab village. In the E. part are the houses of the *employes*, and the works by which water is pumped from the Fresh-water Canal to Port Said. On the high ground in the immediate neighbourhood of Ismailia a fine hospital (Hôpital Saint-Vincent de Paul) has been built by the Canal Company.

The course of the Canal through **Lake Timsa**, or Bahr al Timsa, "The Lake of the Crocodile," to which the Red Sea is believed to have formerly extended, is about $2\frac{1}{2}$ m., and is marked by buoys.

After 4 m. the Canal reaches the higher ground of Tussum, where the level of the desert is 20 ft. above the sea, and here the first working encampment in the S. half of the isthmus was formed in 1859. 3 m. to the S. is **Serapeum**, where the level is from 15 to 25 ft. above the sea, so called from some remains of a temple of Serapis, lying 4 m. to the W. $1\frac{1}{2}$ m. from this the Canal enters the **Bitter Lakes**, where the course is again buoyed. These lakes are the ancient Gulf of Heræopolis, and some authorities hold that the passage of the Israelites was through this. At the N. and S. ends of the principal lake is an iron lighthouse 65 ft. high, on a solid masonry base. After 86 m. from Port Said the deep cutting of Shaluf is reached, in which is a band of sandstone, with layers of limestone and conglomerate, in which fossil remains of the shark, hippopotamus, tortoise, and whale, have been found. From this to the Suez mouth of the Canal is $12\frac{1}{2}$ m.

All the way from Ismailia the banks are fringed with vegetation, and the plain on either side is dotted with bushes.

SUEZ.—The chief historical interest of Suez is derived from its having been long supposed to be the spot near which the Israelites crossed the Red Sea under the guidance of Moses and where the Egyptian army was drowned, but modern criticism tends to place the scene farther N. In the early years of the 18th century Suez was little better than a small fishing-village, galvanised now and then into commercial life by the passage of caravans going to and fro between Asia and Egypt. But in 1837, owing to the exertions of Lieutenant Thomas Waghorn (1800-1850; statue at Suez), the route through Egypt was adopted for the transit of the Indian mail, and in 1840 the P. & O. Company began running a line of steamers regularly between India and Suez. This was followed in 1857 by the completion of a railway line from Cairo (since removed), and Suez soon began to increase in size and importance. It suffered, however, from the want of fresh water, until the completion (1863) of the Fresh-water Canal to Suez brought an abundance of Nile water to the town. With the completion of the Canal the activity of the town has decreased, and the fine quays and warehouses are unused, as steamers now usually anchor in the Roads, about 1 m. distant from Port Tewfik, the entrance to the Canal, and about $2\frac{1}{2}$ m. from the town of Suez. A railway line runs to Ismailia and on to Cairo and Port Said.

The **Old Town** itself offers few points of interest. To the N. of the town are the storehouses of the P. & O. Company, the lock which terminates the Fresh-water Canal, and the *English Hospital*; and on the heights above is the chalet of the Sultan, from which there is a magnificent view. In the foreground is the town, the harbour, the roadstead, and the mouth of the Suez Canal; to the right, the

range of **Gebel Attaka**, a most striking and beautiful object, with its black-violet heights hemming in the Red Sea. Away to the left, though considerably farther S., are the rosy peaks of the Mount Sinai range; and between the two, the deep blue of the gulf.

EXCURSION TO CAIRO.—On the homeward voyage a flying visit can be paid to **Cairo**, while the steamer is passing through the Canal. The necessary arrangements will be made by wireless with Messrs Thomas Cook & Son by the purser on board, who will also receive the advertised fare (£7 a head for parties of not less than four). A police permit (20 piastres, 4s.) must be obtained before disembarkation. The journey by car to Cairo over the desert road takes about three hours. On arrival at Cairo lunch is served, and the Pyramids, the Sphinx, the Citadel, and the Mosque of Muhammad Ali are visited by car; and the 6.0 p.m. train is taken (4½ hours, restaurant car) to Port Said (p. xxxix) where the steamer is rejoined. The excursion in the reverse direction from Port Said must *not* be attempted by passengers on the mail steamers.

EXCURSION TO WELLS OF MOSES.—By those landing for Egypt at Suez a pleasant excursion may be made to the **Wells or Fountains of Moses, Ain Musa**. It will occupy about half a day. Passengers disembark at the jetty which communicates with the Quarantine station for pilgrims returning from Mecca. The Canal is crossed by the ferry used for the passage of caravans. From this point to Ain Musa the distance is about a mile; donkeys are available. The journey can also be made by car from Suez in about two hours. Messrs Thomas Cook & Son provide either method of transport: arrangements should be made with them at Port Said.

The "Wells" are a sort of oasis, formed by a collection of springs, surrounded with tamarisk bushes and palm-trees. Since it has become, as Dean Stanley called it, "the Richmond of Suez,"—a regular picnicking place for the inhabitants of that town—some Arabs and Europeans have settled in it, and there are now a few houses, and gardens with fruit-trees and vegetables. The water from the springs has a brackish taste. Most of them are simply holes dug in the soil, which is here composed of earth, sand, and clay; but one is built up of massive masonry of great age. Though not mentioned in the Bible, its position has always caused it to be associated with the passage of the Red Sea by the Israelites, and tradition has fixed upon it as the spot where Moses and Miriam and the Children of Israel sang their song of triumph.

THE RED SEA.—A fresh breeze from the N. generally prevails for two-thirds of the voyage down the Red Sea, and is during the winter months succeeded by an equally strong wind from the S. for the rest

of the way. During the summer the wind from the N. blows throughout the sea, but is light in the southern half, and the heat is great. The **Sinaitic Range** is the first remarkable land viewed to the E., but Sinai itself, 37 geographical m. distant, can be seen only for a few minutes.

The Red Sea extends from the head of the Gulf of Suez to the Strait of Bab-el-Mandeb, about 1300 m., and its greatest width is about 200 m. At Ras Muhammad it is split by the peninsula of Sinai into two parts—one the Gulf of Suez, about 150 m. long, and from 10 to 18 m. wide, and the other the Gulf of Akaba, about 100 m. long, and from 5 to 10 m. wide.

Wherever seen from the sea the shores of the Red Sea present an appearance of absolute sterility. A broad, sandy plain slopes inappreciably to the foot of the mountains, which are in most parts a considerable distance inland. The ordinary mail-steamer's track, however, lies down the centre of the sea, and little more than the summits of the distant bare and arid mountains will be seen.

Throughout the Red Sea enormous coral reefs run along the coasts in broken lines parallel to the shores, but not connected with them. They usually rise out of deep water to within a few feet of the surface. A navigable channel, from 2 to 3 m. wide, extends between them and the E. coast, and a narrower one on the W. coast. The whole sea is in course of upheaval. The former seaport of Adulis, in Annesley Bay, near Massowa, is now 4 m. inland.

The tides are very uncertain. At Suez, where they are most regular, they rise from 7 ft. at spring to 4 ft. at neap tides.

During the hottest months—July to September—the prevalence of northerly winds drives the water out of the Red Sea. The S.W. monsoon is then blowing in the Indian Ocean, and the general level of the Red Sea is from 2 to 3 ft. lower than during the cooler months, when the N.E. monsoon forces water into the Gulf of Aden and thence through the Strait of Bab-el-Mandeb.

After leaving Suez the **lighthouses** seen are Zafarana and Ras Gharib, both on the W. coast before Tor is reached. Then follows the light on Ashrafi, just inside the mouth of the Gulf of Suez, and that on Shadwan, just S. of it. The light on *The Brothers* is nearly due E. of Kosseir. The Daedalus Reef, small and dangerous, lies in mid-channel in lat. 25°, and was a source of dread before the light was erected. The last light is on Perim Island, in the Bab-el-Mandeb.

Below Kosseir (lat. 26°)—the ancient Leucos Limen (White Harbour) and the port of Upper Egypt—and Ras Benas (lat. 24°),

near which was the port of Berenice, is situated **PORT SUDAN**, 870 m. S. of Suez: this port was opened by Lord Cromer for the Sudan Government in 1907. It is the headquarters of a Province, and possesses a comfortable hotel (expensive), managed by the Sudan Government Railways, reached from the quayside by five minutes' row across the harbour. There is a fine Government Hospital. The Eastern Telegraph Company's office is one minute's walk from the hotel, and the National Bank of Egypt is in the town. The railway journey to Khartoum (*via* Berber) takes about twenty hours by express train. 30 m. S. of Port Sudan lies **SUAKIN**, in lat. 19° , on the coast. It is the centre of native trade between Arabia and the Sudan; from it there is a railway line connecting with the line between Port Sudan and Berber. It is the scene of the two English expeditions of 1884, 1885, neither of which led to any result, and in 1896 was again held for the Khedive of Egypt by our troops, which caused a diversion of Osman Digma's forces, thus enabling the Khedive's troops, under Sir Herbert (the late Earl) Kitchener, the more easily to reconquer the North Sudan. The principal tribes in the vicinity are the Hadendowa and Amarar.

About 120 m. N. of Suakin, on the Arabian coast, is **Jiddah**, the seaport of Mecca (Makka), 60 m. E. The population, including surrounding villages, is about 20,000. English and other steamers call here frequently. The anchorage is $3\frac{1}{2}$ m. from the shore. The town is square in shape, enclosed by a wall with towers at intervals, and on the sea-face by two forts. There is a good street parallel to the sea. The population is most fanatical, and Europeans landing must behave in all respects cautiously. There are three entrances to the town on the sea side, but the central one at the jetty is the only one in ordinary use. The gate on the S. side of the town is seldom opened, that on the N. is free to all, but the E. or Mecca gate, which formerly was strictly reserved for Muhammadans, should be approached with caution. The only sight of the town is the so-called Tomb of Eve, which lies to the N. This is a small mosque in the centre of two long, low walls 140 ft. in length, which are supposed to enclose the grave. The antiquity of the tradition is unknown. Jiddah was bombarded by the British in 1858 in retribution for a massacre of the Consul and other British subjects by the population. Large numbers of pilgrims proceed on the Hajj (pilgrimage to Mecca) every year from India.

HODEIDA, also on the E. coast 200 m. N. of the Straits of Bab-el-Mandeb, in lat. $14^{\circ} 40'$ N., has a population of about 40,000. The anchorage is $3\frac{1}{2}$ m. from the shore. European steamers call weekly or oftener. Hodeida has well-built houses and an amply-supplied

market, and its mosques, with fine domes and minarets, give it a handsome appearance. **Mocha**, which it has supplanted as a commercial port, is 100 m. S.

The island of **Perim** occupies the narrowest part of the Strait of Bab-el-Mandeb ("the Gate of Tears"). It is distant $1\frac{1}{2}$ m. from the Arabian coast and 9 to 10 m. from the African. The average width is $1\frac{1}{2}$ m., the greatest length $3\frac{1}{2}$ m. The formation is purely volcanic, and consists of long, low hills surrounding a capacious harbour about $1\frac{1}{2}$ m. long, $\frac{1}{2}$ m. in breadth, with a depth of from 4 to 6 fathoms in the best anchorages. The highest point of the island is 245 ft. above sea-level. All endeavours to find water have failed, and but little is procurable from the mainland near. There are water tanks that used to be supplied from Aden, but a condensing apparatus is now found the most convenient means of supply. The British are the only nation who have ever permanently occupied Perim. Albuquerque landed upon it in 1513, and erected a high cross on an eminence, and called it the island of *Vera Cruz*, by which name it is shown on old Admiralty charts. Afterwards it was occupied by pirates, who in vain dug for water. In 1799 the East India Company took possession of it, and sent a force from Bombay to hold it and prevent the French then in Egypt from passing on to India, where it was feared they would join Tipu Sultan. The lighthouse on the highest point was completed in 1861, and since then two others have been built on the shore. The garrison, furnished from Aden, occupies a small block-house for the protection of the lighthouse and coaling-stations. The Western side of the large inner harbour has been assigned to the Perim Coal Company, who have made the place one of the most perfect coaling and salvage stations in the East. The powerful salvage steamers are always ready to render assistance to vessels in distress.

Aden, lat. $12^{\circ} 46'$, long. E. $44^{\circ} 58'$, situated on the E. promontory of a bay 8 m. long and 4 m. deep, was long held by the Turks, who captured the port from the Arabs. Marco Polo, the Venetian, visited Aden on his return from his travels in China. He records: "And it is a fact that when the Soldan of Babylon went against the city of Acre" (in A.D. 1291) "this Soldan of Aden sent to his assistance 30,000 horsemen and 40,000 camels, to the great help of the Saracens and the grievous injury of the Christians. He did this a great deal more for the hate he bears the Christians than for any love he bears the Soldan." This was the Mameluke Sultan of Egypt, Malik Ashraf Khalil. On the 18th February 1513 Albuquerque sailed from India with twenty ships for the conquest of Aden. In the assault on the fortress their ladders broke, and although the Portuguese took "a bulwark which guarded the port with thirty-

nine great pieces of cannon,' they were obliged to withdraw **after** a four days' siege. The first English vessel visited Aden in 1619.

Aden was taken from the Arabs by the British on the 19th of January 1839.¹ The boundary was last settled by the Anglo-Turkish Convention of 1914. A railway was constructed in 1915 from Aden to Lahej, 26 m.; and has since been extended to Habil, 8 m. further.

Aden is hot, but healthy. The promontory is about 5 m. long and 3 m. broad, and the highest point on it, the Rock, rises 1700 ft. above the sea. The lighthouse on Ras Marshag, the S.E. point, has a fixed light visible 20 m. off. Aden and Perim have a population of 56,500 (1921). A visit to the bazaar, if the stay of the steamer will allow of this, will show wild Arabs from the interior of Arabian Yemen, Egyptians, hideous Swahilis from the coast of East Africa, untamed, shock-headed Somalis, Jews of various sects, Parsis, British soldiers, Bombay Mahrattas, and Jack-Tars. The Crater used in former days to be the fortress of Aden. Now modern science has converted "Steamer Point" into a seemingly impregnable position, the peninsula which the "Point" forms to the whole Crater being cut off by a fortified line which runs from N. to S. just to the eastward of the coal wharves. The principal European houses, hotels, stores, and the Anglican, Scotch, and Roman Catholic churches are at Steamer Point, also a bank. In the Crater there are two churches.

It takes from twelve to twenty minutes to land at the Post Office Pier, which is broad and sheltered. To the left of it are the hotels and shops.

Inside the Light Ship the water shallows to 4 fathoms, and a large steamer stirs up the mud with the keel and action of the screw. As soon as the vessel stops, scores of canoes, with one or two Somali boys in each, paddle off and surround the steamer, shouting, "Have a dive—have a dive," and "Good boy—good boy," all together, with a very strong accent on the first syllable, and dive for small coins flung to them. Owing to a number of fatalities from sharks, this is prohibited in the S.W. monsoon months.

Steamers seldom stop nowadays for more than a few hours at Aden. Notice is always posted on board as to the desirability or not of landing.

The tanks under the Peak are worth a visit, but the distance to them is about 5 m. Their restoration was undertaken in 1856, and they are capable of holding 8,000,000 gallons of water. The ravines which intersect the plateau of the Crater converge into one

¹ Aden was the first addition to the Empire in the reign of Queen Victoria. See *Kings of Arabia*, by Lt.-Col. H. F. Jacob (Mills & Boon, 1923).

valley, and a very moderate fall of rain suffices to send a considerable torrent down it. This water is partly retained in the tanks which were made to receive it, and which are so constructed that the overflow of the upper tank falls into a lower, and so on in succession. As the annual rainfall at Aden does not exceed 6 or 7 in. Malik al Mansur, King of Yemen, at the close of the 15th century built an aqueduct to bring the water of the Bir Hamid into Aden (see Playfair's *History of Yaman*).

The **Salt Pans** on the way to Sheikh Othman are curious. The sea-water is pumped into shallow pans cut out of the earth, and allowed to evaporate, and the salt which remains is collected. It belongs to an Italian company, who pay royalty on every ton of salt procured. The Keith-Falconer Medical Mission at Sheikh Othman, as well as Steamer Point, was established by the Hon. Ion Keith-Falconer, Arabic Professor, Cambridge, who died there on 11th May 1887. His tomb, of fine Carrara marble, is in the military cemetery of Aden. The Mission, under the care of the doctors of the Free Church of Scotland, is most popular.

After leaving Aden the only land usually approached by steamers bound for India is the island of **Socotra**,¹ which is about 150 m. E. of Cape Guardafui, the E. point of the African continent. The island is 71 m. long and 22 m. broad. Most of the surface is a table-land about 800 ft. above sea-level. The capital is Tamarida, or Hadibu, on the N. coast. It is politically a British possession subordinate to Aden, but administered in its internal affairs by its own chiefs.

Four days after passing Socotra the mainland will be sighted behind Bombay, which lies 6° N. of Aden in lat. 18° 58' above the Equator and long. 72° 48' E. of Greenwich.

¹ Known to the Greeks and Romans as the island of Dioscorides. This name and that by which the island is now known are (according to the *Encycl. Brit.*) usually traced back to a Sanskrit form Dvipa-Sakhadhara, "the island abode of bliss."

Line and Date of Sailings.	Tonnage of Steamers.	Length of Voyage.	Fares.		Remarks.
			1st Class.	2nd Class.	
To Bombay and Karachi.					
<i>P. & O.</i> —		days.			
From London every Friday.	8—21,000	21	£74—94	£56—62	Passengers proceed by B.I.S.N. steamer from Bombay to Karachi.
From Marseilles do.	..	14	£66—86	£52—58	
<i>B.I.S.N. Co.</i> —					
From London occasionally.	8—9,000	23	£62—66	£52	
<i>Anchor Line</i> , from Liverpool about twice monthly.	8,500	22	£60		
<i>Ellerman's City and Hall Lines</i> , from Liverpool about twice monthly.	6—10,000	24	£60—64	£46—48	Usual stay at Bombay 6 days.
<i>Lloyd Triestino</i> , from Venice, every four weeks.	8,000	16-17	£56—66	£46—54	Fares according to season.
<i>Marittima Italiana</i> , from Genoa, every four weeks.	10,000	17-18	£56—66	£46—54	"
To Calcutta.					
<i>P. & O.</i> , occasionally.	8—9,000	32	£66—70	£56	<i>Intermediate.</i>
<i>B.I.S.N. Co.</i> —					
From London, fortnightly.	8—9,000	33	£66	£56	
<i>Ellerman's City Line</i> from Liverpool, about twice monthly.	5—10,000	30	£64—68	£50—52	
To Madras.					
<i>P. & O.</i> —					
From London, occasionally.	7,000	27	£62—66	£52	
<i>B.I.S.N. Co.</i> —					
From London, fortnightly.	7—9,000	29	£62—66	£52	
<i>Ellerman's City Line</i> —					
From Liverpool, occasionally.	5—10,000	27	£60—65	£48—50	
To Colombo.					
<i>Orient Line</i> — [days.					
From London, alternate Satur.	12—20,000	21	£68—90	£54—60	
From Toulon, 6 days later.	..	15	£64—86	£50—56	
From Naples, 8 days later.					
<i>P. & O.</i> —					
From London, every week.	9—21,000	22	{ £70-90	£54—60	Mail. <i>Intermediate.</i> Mail. <i>Intermediate.</i>
From Marseilles, following Friday.	{ £60-64	£50	
			{ £66-86	£52—58	
			{ £56-60	£48	
<i>B.I.S.N. Co.</i> —					
From London, alternate Sats.	8—9,000	26	£60—64	£50	
<i>Bibby Line</i> —					
From Liverpool, alternate Frid.	7—10,000	24	£66		
From Marseilles, alternate Sat.	..	16	£58	..	One class only.
<i>Messageries Maritimes</i> —Every 14 days from Marseilles.	8—16,000	17	£64—78	£49—58	
<i>Aberdeen and Commonwealth Line</i> —					
From London, monthly.	13,850	21	£29—48	..	One class only.
<i>Ellerman's City Line</i> —					
From Liverpool, about twice monthly.	6—10,000	25	£58—62	£48—50	
<i>Ellerman & Bucknall, S.S. Co. Ltd.</i> —					
From Southampton, about monthly.	6—10,000	22-23	£58—62	£48—50	
<i>Nederland Royal Mail Line</i> —					
From Southampton, alternate Thursdays.	8—16,000	23	£78	£55, 10/	
From Genoa, alternate Fridays.					

Line and Date of Sailings.	Tonnage of Steamers.	Length of Voyage.	Fares.		Remarks.
			1st Class.	2nd Class	
To Colombo— <i>continued</i> .		days.			
<i>Nippon Yusen Kaisha</i> —					
From London, alternate Saturdays.	9—11,000	25-26	£70—75	£52	
From Marseilles, alternate Saturdays.	..	18	£62—67	£50	
<i>Norddeutscher Lloyd</i> —From Genoa monthly.	9,000	17-18	£60		
<i>Rotterdam Lloyd</i> —					
From Southampton, alternate Fridays.	5,000—12,000	23	£78	£55, 10/	
From Marseilles, alternate Fridays.	..	16	£70	£50, 10/	
To Rangoon.					
<i>Bibby Line</i> —					
From Liverpool, alternate Fridays.	..	30	£76	..	One class only.
From Marseilles, alternate Saturdays.	7—10,000	22	£68		
<i>Henderson Line</i> , from Liverpool, alternate Fridays.	5—10,000	30	£65	..	One class only.

(4) GENERAL INFORMATION, STATISTICAL, ETHNOLOGICAL, HISTORICAL, ARCHÆOLOGICAL, AND MATERIAL

THE PEOPLE OF INDIA

The census of 1921 gave the population of British India and Burma as follows :—

	Area in Square Miles.	Population.
British Territory	1,094,300	247,003,293
Indian States and Agencies	711,032	71,939,187
India, Total	1,805,332	318,942,480

Of this total of 319,000,000 about 116,000 (in 1911 the number was 123,000) are British-born, of whom more than half are soldiers. The sanctioned strength of the army in British India on 1st April 1928 was as follows :—

British Troops (including Officers)	68,300
Indian do.	162,300
	<u>230,600</u>

In addition, there were : Indian Army Reserve of Officers, 1850 ; Indian Army Reserve, 42,900 ; Auxiliary Force in India (including Officers) 35,700 ; Indian State Forces, 44,700 ; Indian Territorial Force, 19,000.

The census of 1921 gave the following religious statistics :—

Hindus	216,734,586	Sikhs	3,238,803
Primitive Tribal Re-		Jains	1,178,596
ligions	9,774,611	Parsis	101,778
Muhammadans	68,735,233	Jews	21,778
Buddhists	11,571,268	Minor Religions and	
Christians	4,754,064	Religions not returned	18,004

For other Statistical Tables, see pp. cxv-cxvii.

THE INDIAN STATES

IT is impossible to travel from Bombay to Calcutta, Delhi or Madras, without passing in each case through hundreds of miles of territory which is governed by its own rulers and lies, strictly speaking, outside British India.

Of the six hundred and seventy-five states in India, seventy-three have rulers who are entitled to a salute of eleven guns or more and are addressed as "His Highness." The two largest states are Hyderabad in the south, with an area of 82,698 square miles, and Jammu and Kashmir in the north, with an area of 80,000 square miles. In the former a Muhammadan prince—His Exalted Highness the Nizam—rules over a population mainly composed of Hindus ; in the latter, the conditions are reversed : and it is a remarkable fact that communal differences, which lead from time to time to serious disturbances in British India, are unknown in the Indian States. Treaties regularise the relations of the states with the Government of India which is represented by Agents and Residents.

It is in the Indian States rather than in the territories directly administered by the British that old-world customs and practices survive ; and the visitor who, by means of a special introduction to the Agent or Resident, obtains the opportunity of observing them at one of the more remote Rajput capitals or in the Nair kingdoms on the Malabar coast, will be amply rewarded.

There are Agents to the Governor-General in Rajputana (Ajmer), Baluchistan (Quetta), and Central India (Indore) : and also in the Western India States (Rajkot), the Punjab States (Lahore), and the Madras States (Travancore). The principal Residents are stationed in Hyderabad, Mysore (Bangalore), Kashmir (Srinagar), Gwalior, and Baroda. There is a British Minister at Kabul, and a Resident at Khatmandu (Nepal) : both these states are independent.

THE MUHAMMADANS

MUHAMMAD ("the praised," from *hamd*, praise) was born at Mecca (Makka) on the 29th August 570 A.D. in the Koreish (Quraish) ruling tribe. His father, Abdulla, was a merchant, son of Abdul Muttalib, the patriarch of the House of Hashim; his mother's name was Amina. His father died before his birth, his mother when he was barely five years old. He remained three years in the charge of his grandfather, and on the latter's death passed to the care of his uncle, Abu Talib. When twenty-five years old he became manager or agent to a rich widow, named Khadija, who, although fifteen years his senior, offered him marriage. By her he had sons, who all died in infancy, and four daughters, of whom three survived, the youngest, Fatima, being married to Ali, the son of Abu Talib; from her are descended the nobility of Islam, the Saiyads and Sharifs.

At the age of forty Muhammad claimed to have received the first divine communication in the solitude of the mountain Hira, near Mecca, where the call came to him, and the angel Gabriel commanded him to preach the new religion. The Meccans persecuted him and his followers for his preachings; his wife and uncle died; and he became poverty-stricken. Threatened with death, Muhammad, accompanied by Abu Bakr, left Mecca on the 16th July 622. Escaping from the Koreish, they reached the rival city, Yathreb, some 270 m. to the N., where he was accepted as a Prophet. The city was henceforth called the city of the Prophet—Medīnat-un-Nabi, or, shortly, Medina. The Meccans pursued him and the Medīnists with hostility, and he repelled their attacks. In the year 630 he, with 10,000 men, conquered Mecca. Returning to Medīna, he died on the 8th of June 632, and was there buried.

The chief tenet of the Muhammadan religion is Islam, which is generally held to mean, resignation, submission to God; but some describe it as "striving after righteousness." A Muslim, or Mussalman, is one who professes Islam. In its dogmatical form it is Iman (faith), in its practical Din (religion). The fundamental principle is, "There is no God but God; and Muhammad is the Prophet of God (Lá illáha illá 'lláh Muhammad Rasulu 'lláh). This is the *Kalima*, or creed, which is to be recited. There are also four principal duties: (1) Daily prayers (which should be said five times a day—at daybreak, noon, afternoon, sunset, nightfall); (2) the giving of alms (in certain proportions of property, to certain classes of persons); (3) the fast of Ramazan (from dawn to sunset for a month, from the appearance of the new moon); (4) a pilgrimage (Hajj, Hajji), once in a lifetime, to the ancient shrine of the Ka'ba, at Mecca. In the Koran (which

embodies the teachings and precepts of Muhammad, and is believed to have been sent down by God to the seventh or lowest heaven and then revealed from time to time to Muhammad by the angel Gabriel) a holy war or *jihad* is enjoined as a religious duty; but the Muhammadan subjects of a government, under which the practices of the Muhammadan religion are freely permitted, are bound to obey the government. The Muhammadans believe in resurrection, heaven, and hell. The meaning of the description of a future existence as given in the Koran is much disputed. On the one hand large masses of Muslims accept the statements of the Koran as to the sensuous delights of Paradise in their literal sense; on the other hand, they are regarded as word-paintings used in a figurative sense. In hell all who deny the unity of God will be tortured eternally. The idea of the exclusion of women from Paradise is at variance with the whole tenor of the Koran, and is contradicted by various passages. Muhammad enjoined care in ablution of the hands, mouth, and nose before eating or praying. The Koran expressly forbids the use of wine, including all inebriating liquors and any intoxicants. It forbids also the eating of the flesh of swine; and no animal is lawful food unless it be slaughtered by cutting the throat. Usury and games of chance are prohibited, and the laws against idolatry are very stringent. A Muslim is allowed to marry one, two, three, or four wives, provided, it is said, he can deal with all of them with equity; if not, he is limited to one. He can also cohabit with female slaves obtained by purchase or made captives in war (called "those whom your right hand hath acquired") in addition to the lawful wives. An absolute divorce consists of the mere repetition of the words, "Thou art divorced" three times. Slavery is said to have been limited to those who were taken in lawful warfare, and under certain circumstances they were emancipated. Besides the women above-mentioned, a man must not look upon the face of any other woman except a near relative. There is no priesthood in Islam, every man is his own priest and pleads for himself for forgiveness and mercy. Essentially a democratic creed, it recognises no distinction of race or colour among its followers. Hope and fear, reward and punishment, with a belief in predestination, form the system of faith. It is contrary to Islam to make any figure or representation of anything living.

There are two main divisions among the Muhammadans. The chief point of difference between them arises out of the question of the title to the spiritual and temporal headship of Islam. The Sunnis advocate the principle of election, and recognise Abu Bakr, Omar, and Othman as the first three Khalifas (Khalifa, Caliph = Vicegerent), and Ali as the fourth; the Shias adhere to apostolical descent by appointment and succession, and regard Ali as the first Khalifa. In

India about five-sevenths are Sunnis. They are again divided into four principal "persuasions"—the Hanafi, Shafei, Maliki, and Hanbali—so called after their founders. Hanafism is generally prevalent in India and Arabia. The Shias are two-sevenths of the Indian Muhammadans. Shiaism is the State religion of Persia. Of its several sub-sects, the Asna-aasharia is the principal, meaning that it recognises the spiritual headship of the twelve Apostles of the House of Muhammad. In the 16th century Sultan Salim, the great Osmanli conqueror, obtained the Caliphate from the last Caliph at Cairo; till recently the Osmanli rulers of Turkey assumed the title of Caliph, and were recognised as spiritual head, *Shaikh-ul-Islam*, by the bulk of the Sunnis in India and elsewhere. In November 1922, the Grand National Assembly at Angora declared that the office of Sultan had ceased to exist, and in March 1924 abolished the Caliphate.

Eras.—The Muhammadan era of the Hijra takes its name from the "departure" of Muhammad from Mecca, commencing with the date of Friday, the 16th of July 622 A.D., ordered by the Khalifa Omar to be used as their era by Muhammadans. Their year consists of twelve lunar months, as follows:—

Muharram	30 days	Rajab	30 days
Safar	29 "	Sh'aban	29 "
Rabi ul awal	30 "	Ramazan	30 "
Rabi us-sani	29 "	Shawwal	29 "
Jumada ul awal	30 "	Zilkada	30 "
Jumada us-sani	29 "	Zil Hijja	29 "

= 354 days.

Their year, therefore, is 11 days short of the solar year, and their New Year's Day is every year 11 days earlier than in the preceding year. In every 30 years the month Zil Hijja is made to consist 11 times of 30 days instead of 29, which accounts for the 9 hours in the lunar year, which is thus 354 days, 9 hours. To bring the Hijra year into accordance with the Christian year, express the former in years and decimals of a year, multiply by .970225, add 621.54, and the total will correspond exactly to the Christian year. Or to effect the same correspondence roughly, deduct 3 per cent. from the Hijra year, add 621.54, and the result will be the period of the Christian year when the Muhammadan year begins. The Muhammadan year 1348 Hijra commences on the 9th June 1929.

The Tarikh Ilahi or Era of Akbar, and the Fasli or Harvest Era.

These eras begin from the commencement of Akbar's reign on Friday, the 5th of Rabi us-sani, 963 A.H. = 19th of February 1556 A.D.

MUHAMMADAN FESTIVALS

Bakar Id, *Id-ul-uzha*, or *uz-zoha*, or *Id-i-kurban* (sacrifice), is held on the 10th of Zil Hijja in memory of Abraham's offering of Ishmael, which is the version of the Koran. Camels, cows, sheep, goats, kids, or lambs, are sacrificed.

Muharram (The Sacred¹), is a period of mourning (the Shias fast on some of the days) in remembrance of the death of Husain, the son of Ali by Fatima, the daughter of Muhammad. Hasan, eldest son of Ali, was poisoned at the instigation of the future Khalif Yezid in 49 A.H., and Husain was murdered at Karbala on the 10th of Muharram, 61 A.H.=9th October 680 A.D. The fast begins on the 1st of Muharram and lasts ten days. Muslims of the Shia persuasion assemble in the Ta'ziya Khana, or house of mourning. On the night of the 7th an image of Burak, the animal (vehicle) on which Muhammad is popularly supposed to have ascended to heaven, is carried in procession, and on the 10th Tabuts² or Taziyas (biers). These are thrown into the sea, or other water, and in the absence of water are buried in the earth. The mourners move in a circle, beating their breasts with cries of "Ya! Hasan! Ya Husain!" or "Ya Ali!" At this time fanatical spirit is apt to run high, and serious disturbances sometimes take place (see "Hobson-Jobson" in the *Glossary of Anglo-Indian Words and Phrases*, Yule and Burnell, Murray, 1903).

Akhiri-Chahar Shamba, held on the last Wednesday of Safar, when Muhammad recovered a little in his last illness and bathed for the last time. It is proper to write out seven blessings, wash off the ink and drink it, as also to bathe and repeat prayers.

Bárah Wafát, held on the 12th of Rabi ul awal in memory of Muhammad's death, 11 A.H.

Shab-i-barát (night of allotment), held on the 16th of Sh'aban, when it is supposed that human deeds are measured and their meeds allotted: only observed in India; celebrated with fireworks. The Koran ought to be read all night, and the next day a fast should be observed.

*Ramazán*³, the month of fasting of the Muhammadans. The night of the 27th is called Lailat-ul-Kadr, "night of power," because the Koran came down from heaven on that night.

'Idu 'l-fitr, the festival when the fast of the Ramazan is broken. The evening is spent in rejoicings.

¹ The name is derived from the corresponding old Arabic month, in which it was unholy to wage war.

² The shape of this is intended to simulate the tomb of Ali at Karbala.

³ The name is derived from ramaz, burning, this month being the middle summer month in the first Muhammadan year.

MUHAMMADAN RULE IN INDIA

The first connection of the Muhammadans with India in the 7th and 8th centuries was naturally by the old coastal route between Arabia and W. India, and from the seat of power of the Caliphate at Bagdad. When this power grew weak, first the Seljuk kingdom broke away from it on the E., and then the kingdoms of Ghazni and Ghor in the Afghan mountains split off in turn. Early in the 11th century the N. of India, as far as Benares, Gujarat, and Kathiawar, was subjected to repeated invasions by the famous Mahmud of Ghazni; and at the close of the 12th century the Prince of Ghor and his lieutenants effected the permanent conquest and occupation of that part of the country. For three hundred years the Slave dynasty and the other dynasties, chiefly Pathan, which succeeded it, ruled at Delhi and extended their authority to Bengal and Gujarat, and even to the Deccan; but the repeated invasions of the Mughals on the N., and probably the failure of robust recruits from the Afghan mountains, led to the gradual weakening of the central power, which was finally shaken to its very foundations by the invasion of Timur at the end of the 14th century (p. 314); and when, a century later, Babar and his Mughals conquered India, the Imperial authority had been reduced to very narrow limits. Meanwhile, one Muhammadan dynasty, an offshoot of the Imperial line, had been established at Gaur, in the Malda district in Bengal (p. 480), from an early date; and another, known as the Bahmani, rather later at Gulbarga, in the Deccan (p. 538), when the power of Delhi recoiled from there, and by the close of the 14th century Muhammadan Governors had also become independent in Gujarat (p. 201) and Malwa (p. 149), and at Jaunpur (p. 431). Thus, though the power of the Delhi capital was being threatened by the revived Hindu forces of Rajputana when Babar became Emperor, N. India generally was under Muhammadan rule at that time. It was then, too, that the Muhammadan kingdoms of Ahmadnagar (p. 536), Bijapur (p. 571) and Golconda (p. 565) were founded on the fall of the Bahmani dynasty; and when these kingdoms crushed the only great Hindu power in S. India, that of Vijayanagar (p. 585), at the Battle of Talikota in 1565 A.D., about the time, when Spain attained its greatest power, it looked as if Muhammadan sway would be permanently extended to Cape Comorin. These kingdoms, however, exhausted their energies in internal and internecine quarrels; and when, after subduing the other States of India, the Mughal Emperors turned to them, they fell one by one, but in their fall, and through the consequences of it, dragged down the victor to ruin also. While it lasted, the Mughal dynasty was dis-

tinguished by extraordinary outward splendour, which evoked the title of "the Great Mughal," or Mogul, from European travellers; and no dynasty, perhaps, since the world began, ever produced six Princes so great, take them all in all, as Babar, Humayun, Akbar, Jahangir, Shah Jahan, and Aurangzeb, whose united reigns covered a period of nearly two hundred years, 1526-1707. But as its splendour was unparalleled, so were the suddenness and completeness of the fall of the dynasty; and within sixty years of the death of Aurangzeb the Mahrattas were temporarily masters of Delhi, which was simply rent to death by the invasions of the Persian Nadir Shah and the Afghan Ahmad Shah in 1739 and 1757. It is almost impossible to realise that these invasions, which can be paralleled only by those of Attila and Timur, took place at a time when Europe was entering on the modern phase in which we still live, and N. America was about to become a great separate power.

Between these two dates the kingdoms of Oudh and Hyderabad had become independent of the central Delhi Power; if the Great Governors of the Punjab did not become so also, this was due simply to their position between the invaders and the capital, and to the presence of the Sikhs in the province. Neither of the new Muhammadan kingdoms, however, possessed any real vital power; and both of them, and Bengal, would have inevitably fallen a prey to the Mahrattas, after their extraordinary recovery from the carnage of Panipat in 1761, but for the intervention of British power. As it was, when Delhi was taken from the Mahrattas in 1803 they practically dominated India from the Punjab to Hyderabad and Mysore, and from Gujarat to Orissa. The resumption of Oudh in 1856 on account of the reckless misgovernment of its rulers, and the conquests of the Mysore dynasty of Hyder Ali and Tipu Sultan in 1799, and of the Amirs of Sind in 1843, have left Hyderabad the sole remaining Muhammadan power of first-class importance in India, to which can be added as instances of Muhammadan States of recent origin—Khairpur, in Sind (p. 405); Junagadh, in Kathiawar (p. 238); Bahawalpur, in the Punjab (p. 404), Rampur in Rohilkhand (p. 425) and Bhopal in Central India (p. 163). The Nawabs of Janjira and Sachin on the Bombay coast trace their descent from the Sidi (Abyssinian) admirals of the Nizam Shahi kings of Ahmadnagar (p. 536). It is from their subjects that the Lascar crews are largely drawn.

THE HINDUS

IN speaking of the religion of the Hindus it is customary to use such words as Vedism, Brahmanism, and Hinduism, but these names are not recognised by the Hindu orthodoxy. They do not

connote what is commonly called religion. In this chapter the word is used in the sense of a system of worship, etc., which would lead to heaven or give man his desires through the medium of a deity. Thus various systems flourished and decayed.

The first form of the Hindu "religion" was Vedism, the worship of Nature, as represented in the songs and prayers collectively called Veda, and in which the chief gods were the triad, Indra (rain), Agni (fire), and Surya (sun). Then followed Brahmanism, which introduced the idea of a universal spirit, or essence, which permeated everything, men, gods, and the visible world being merely its manifestations. Prose works, called Brahmanas, were added to the Vedas, to explain the sacrifices and the duties of the Brahmins, or priests. The oldest of these may have been written about 1000 to 1200 B.C. The code of Manu, which was formulated in the 2nd or 3rd century of the Christian era,¹ laid down the rules of domestic conduct and ceremony. It divided Hindus² into four *Varnas* (lit. "colours") — first, the Brahmins; second, the warriors, called Kshatriyas; and third, the agriculturists and traders, called Vaisyas. (All these, being of Aryan descent, were honoured by the name "twice born.") Fourth, were the Sudras, or non-Aryan tribes. During the time of Manu the racial distinction between the Aryans and non-Aryans ceased to exist, and the Sudras included all persons who were not initiated to the twice-born status. The Sudras were not allowed to be present at the great national sacrifices or at the feasts. The priests asserted that they, the Brahmins, came from the mouth of Brahma; the Rajputs, or Kshatriyas, from his arms; the Vaisyas from his thighs; and the Sudras from his feet. Caste was originally a distinction between priest, soldier, artisan, and menial. Each trade in time came to have a separate caste; and the priests insisted on the *varna*-duties, because they held that social order was dependent thereon.

Modern Hindu worship and theology form a development of Brahmanism. There is one impersonal and spiritual Being³ which pervades everything—one God, called Brahma. His three personal manifestations are as *Brahma*, the Creator; *Vishnu*, the Preserver; and *Siva*, the Destroyer and Reproducer. *Brahma*, the Creator, is generally represented with four heads and four arms, in which he

¹ Cambridge History of India, Vol. I., *Ancient India*, p. 278.

² Much interesting information regarding the early Hindu peoples of India will be found in Mr R. C. Dutt's *Ancient India*, Mr V. A. Smith's *Early History of India*, and the Cambridge History of India, Vol. I., *Ancient India*, 1922.

³ "Principio coelum ac terras, camposque liquentes,
Lucentemque globum Lunae, Titaniaque astra
Spiritus intus alit, totamque infusa per artus
Mens agitat molem et magno se corpore miscet."

Virgil, Aen., VI. 724.

PLATE 1.
Some Common Forms of Hindu Gods.



PLATE 2.



Sect Marks



1



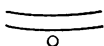
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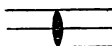
3



4



5



6



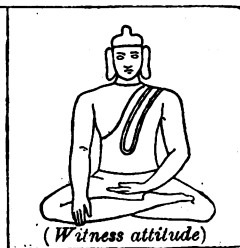
7



8

1, 2, 3, and 4, *Followers of Vishnu.*
5, 6, 7, and 8, *Followers of Siva.*

Buddha



holds a portion of the Veda, a spoon for lustral observations, a rosary, and a vessel of lustral water (see Plate 1). *Sarasvati*, the wife of Brahma, rides on a peacock, and has a musical instrument, the "vina," in her arms (see Plate 1). She is the goddess of music, speech, the arts, and literature.

Vishnu holds a quoit in one hand, a conch shell in another, and sometimes a mace or club in another, and a lotus flower in a fourth (see Plate 1). A common picture shows him with his wife, Lakshmi, sitting on Shesh, the snake (eternity), with Brahma on a lotus springing from his navel (see Plate 2). He is said to have come down to the earth nine times, and is expected a tenth time. These nine incarnations (*avatara*) were in the form of—(1) a fish; (2) a tortoise; (3) a boar (*Varaha*); (4) a man lion (*Narsingh*); (5) a dwarf (*Vamana*); (6) *Parasu rama*; (7) *Rama*, the hero of the epic poem, the *Ramayana*; (8) *Krishna*; and (9) *Buddha*.

Rama carries a bow and arrows (see Plate 1). He is revered throughout India as the model of a son, a brother, and a husband. When friends meet it is common for them to salute each other by uttering Rama's name twice. No name is more commonly given to children, or more commonly invoked at funerals and in the hour of death. His ally, *Hanuman* (p. lxiii) is represented under a monkey form (see Plate 1). He is worshipped as the model of a faithful, devoted servant.

Krishna's biography is given in the epic of the *Mahabharata*. Although himself a powerful Chief, he was brought up among peasants, and is peculiarly the god of the lower classes. As a boy he vanquished the serpent Kaliya by trampling upon his head. He lifted the mountain-ridge of Gobardhan (p. 261) on his finger to shelter the herdsmen's wives from the wrath of Indra, the Vedic rain-god. He had countless wives and sons, and is painted blue. Sometimes he is represented as standing on a snake, with his left hand holding its body and a lotus in his right (see Plate 2); and sometimes he is playing the flute.

The adoption of Buddha as one of the incarnations aimed at a compromise with Buddhism. This led in India to the reabsorption of Buddhism into the general Hindu culture.

Devotion to Vishnu in his human incarnations of Rama and Krishna is the most popular form of the Hindu religion in India. His descents upon earth were for the delivery of men from the threefold miseries of life—viz., (1) from lust, anger, avarice, and their evil consequences; (2) from beasts, snakes, and wicked men; (3) from demons. Vishnu has power to elevate his worshippers to eternal bliss in his own heaven.

Vishnu's wife, *Lakshmi*, the goddess of wealth and beauty, sprang

from the froth of the ocean when churned by gods and demons (see Plate 1). An image of her is often to be found in the houses of shop-keepers. She is specially worshipped during the Diwali festival.

Siva is also called Mahadeva, the great god, and his wife, who is known by several names and in several characters, as Parvati, the goddess of beauty (see Plate 1); Durga, or Kali, the terrible (see Plate 1), etc., is also called Devi, the goddess (see Plate 1). The commonest of these is *Kali*,¹ who requires to be propitiated by sacrifices. Siva holds in his four hands a trident, an antelope, a noose for binding his enemies, and a kind of drum, and wears a tiger's skin about the loins. He is a less human and more mystical god than Vishnu, and is worshipped in the form of a symbol, the *lingam*, or a bull (*Nandi*, the Joyous). As destroyer Siva haunts cemeteries and burning-grounds, but his terrible qualities are now more especially associated with his wife, Kali. He is the impersonation of the reproductive power of nature,² the word Siva meaning "blessed" or "auspicious." He is also the typical ascetic and self-mortifier; and as a learned philosopher he is the chief god of the priests.

Siva has two sons—Ganesh, or Ganapati, and Kartikkeya. *Ganesh* has a fat body and an elephant's head (see Plate 1). He is a great favourite, being worshipped for good luck or success, and he is invoked at the beginning of every Indian book as a bringer of success, and also because he is the god of learning. *Kartikkeya* is the god of war, the leader of the hosts of good demons (see Plate 1). In the south of India he is called Skanda or Subrahmanya.

The Hindu theory of metempsychosis or transmigration of souls, arises from the belief that evil proceeds from antecedent evil, and that the penalty must be suffered in succeeding existences. The Hindu makes offerings to the image of a god; he abstains from killing any animal; he gives money to the priests; and does penances which sometimes extend to severe bodily torture. The caste rules have to be strictly kept, and the priests presented with gifts. Great care has to be taken not to eat food cooked by a man of inferior caste; food cooked in water must not be eaten together by people of different castes, and the castes are entirely separated with regard to marriage. The Hindu has a special theory of his own regarding purity and pollution: these words do not simply mean physical purity. A sacred thread of cotton is worn by the higher castes. Washing in any holy river, particularly the Ganges, and more

¹ In S. India Durga in this form is generally known as Bhawani.

² Probably two-thirds of the Hindus worship Siva under this aspect embodied in the lingam.

especially at Allahabad, Benares, Hardwar, and other exceptionally sacred spots, is of great efficacy in cleansing the soul of impurities. Most of these observances and the worshipping of idols are rejected by the Arya Samaj,¹ a reformed body founded by Swami Dyanand (1827-53), which has attracted many of the educated Hindus in N. India. The Arya Samaj accepts the inspiration of the Vedas only; the chief Brahmo Samajists, mainly confined to Bengal (p. lxxvi), reject them as inspired scriptures.

Travellers should remember that they should not touch any cooking or water-holding utensil belonging to a Hindu, nor disturb Hindus when at their meals; and they should not seek to approach any holy place if objection is made. The most revered of all animals is the cow. Garuda, a mythical being, half man, half bird, is the vehicle of Vishnu, the bull of Siva, the goose of Brahma, the elephant of Indra, the tiger of Durga, the buffalo of Yama, the rat of Ganesh, the ram of Agni, the peacock of Kartikkeya, and the parrot of Kama (the god of love).

As many references to the *Mahabharata* and *Ramayana* occur in the *Handbook*, a brief account of these two famous epics is given here.

The *Mahabharata* in its present form was compiled about 400 B.C. to 400 A.D., but, recording events which may be referred to about 1500 B.C., celebrated the battle between the Pandava (Pandu) and Kaurava (Kuru) Princes. The former, five in number, named Yudhishtir, Bhima, and Arjun, sons of one mother, and Nakula and Sahadeva, sons of another, were the offspring of Pandu, ruler of Hastinapur, an ancient city on the Ganges, 60 m. N.W. of Delhi, who ceded the kingdom to his elder, but blind brother, Dhritarashtra. The Kauravas were the sons of Dhritarashtra, and compelled him to send their cousins into exile, during which the marriage of Draupadi, daughter of Drupada, King of the Panchalas, took place, and most of the adventures which led to their names being attached to so many places all over India. At the end of their exile the Pandavas received the Southern portion of the Hastinapur kingdom, and settled at Indraprastha, now Indrapat (p. 310). Having lost this share of their inheritance through gambling with their cousins, the Pandavas again went into exile for twelve years, after which they returned with an army and claimed five "pats," or small towns, of their former kingdom (Indrapat, Tilpat, Sonapat, Bhagpat, and Panipat). Over this claim the great battle ensued, in which, after eighteen days, nearly all the Kauravas were finally killed, largely through treacherous acts on the part of the Pandavas. The account of the funeral ceremonies of the slain is famous and almost Homeric.

¹ The number of Arya Samajists in 1921 was 467,578, of Brahmo Samajists only 6388.

The five brothers then resumed their residence at Indrapat, and Yudhisbthir celebrated the Aswamedha, or horse sacrifice of imperial rule, on the bank of the Jumna. Finally the brethren and their wives retired to the Himalayas, and sought to reach Mount Meru ; but only the elder brother won admission there ; and as he declined to enter when admittance was refused to his sole remaining companion, a faithful dog, he was admitted with his dog.

The *Ramayana*, ascribed to Valmiki, and probably compiled about the 5th century B.C., related the adventures of Rama, elder son of a King of Oudh, who was passed over in the succession in favour of the son of a younger wife, and banished by his father. Rama accordingly proceeded into exile with his wife Sita to the abode of the hermit Valmiki ; and, though the younger brother proved loyal to him on his father's death, he refused to return to Oudh until the term of his banishment had expired. Before this Sita was carried off from their forest abode by Ravana, king of Lankā (Ceylon), inspired by his sister, whose love Rama had rejected. She was rescued from Lankā by Rama with the help of Hanuman, the monkey general, and proved her chastity by the ordeal of fire ; but (according to a later tradition) was banished by her husband, and remained sixteen years in exile with Valmiki, after which she was finally reconciled to Rama. Rama is commonly known in India as Ram Chandra ; his brother Lakshman constantly appears in the local legends which relate to him.

Ajodhya (p. 431), which ranks as one of the seven sacred Hindu shrines, is famous as the birthplace of Rama, and also as the scene of his cremation.

The Era of Vikramaditya, or Samvat

This era commenced from the first year of the legendary King Vikramaditya, on the 23rd February 57 B.C. It is in ordinary use in N. India. The Vikramajit year, as it is usually called, 1983, corresponds to 1926-27.

The Saka Era

The Saka era dates from 3rd March 78 A.D. This is the era in general use in S. India. The year 1848 of this era corresponds to 1926-27.

The Hindu year has six seasons or *ritus*: *vasanta*, "spring" ; *grishma*, "the hot season" ; *varsha*, "the rains" ; *sharada*, "the autumn" (from *shri*, "to wither") ; *hemanta*, "the winter" ; *shishira*, "the cool season."

Table of the Seasons and Months in Sanskrit, Hindi, and English.

	NAMES OF MONTHS.		
	SANSKRIT.	HINDI.	ENGLISH.
1. VASANTA . . .	{ Chaitra (Aries). { Vaishakha.	Chait. Baisakh.	March-April. April-May.
2. GRISHMA . . .	{ Jyeshtha (Gemini). { Aushadha.	Jeth. Asarh.	May-June. June-July.
3. VARSHA . . .	{ Sravana (Leo). { Bhadra (Virgo).	Sawan. Bhadon	July-August. August-Sept.
4. SHARADA . . .	{ Ashwina. { Kartika.	Asin. Kartik.	Sept.-Oct. Oct.-Nov.
5. HEMANTA . . .	{ Margasirsha. { Pausha.	Aghan. Pûs.	Nov.-Dec. Dec.-Jan.
6. SHISHIRA . . .	{ Magha. { Phalguna (Pisces).	Magh. Phagun.	Jan.-Feb. Feb.-March.

SOME HINDU FESTIVALS

Makar Sankranti.—On the 1st of the month Magh (about 12th January) the sun enters the sign Capricorn or Makar. From this day till the arrival of the sun at the N. point of the zodiac the period is called Uttarayana, and from that time till he returns to Makar is Dakshinayana, the former period being lucky and the latter unlucky. At this festival the Hindus bathe, and rub themselves with sesamum oil. They also invite Brahmans, and give them pots full of sesamum seed. They wear new clothes with ornaments, and distribute sesamum seed mixed with sugar.

Vasant Panchami is on the 5th day of the light half of Magh, and is a festival in honour of vasanta or spring.

Sivarat, the night of Siva, is held about the middle or end of February, when Siva is worshipped with flowers during the whole night.

Holi.—A saturnalia at the vernal equinox, celebrated with the squirting or throwing of red or yellow powder over every one.

Janam Ashtami, held on the 8th of the dark half of Sawan, when Krishna is said to have been born at Gokul (p. 261). Rice may not be eaten on this day, but only fruits and other grains. At night Hindus bathe and worship an image of Krishna, adorning it with *tulsi* or *basil*.

Ganesh Chaturthi, held on the 4th of Bhadon, in honour of Ganesh, a clay image of the god being worshipped and Brahmans entertained. The Hindus are prohibited from looking at the moon

on this day, and, if by accident they should see it, they get their neighbours to abuse them in order to remove the curse.

Dasahara (*Dasaha*, or ten days, commonly *Dussera*), held on the 10th of Asin, in honour of Durga, or Devi, the wife of Siva, who on this day slew the buffalo-headed demon Maheshasur. On this day Rama marched against Ravana, and for this reason the Mahrattas chose it for their expeditions. Branches of the *Butea frondosa* are offered at the temples. This is an auspicious day for sending children to school. The nine preceding days are called Navaratra, when Brahmans are paid to recite hymns to Durga. The Durga Puja holiday is the principal holiday of the year in Bengal.

Diwali, "feast of lamps," held on the new moon of Kartik, in honour of Lakshmi, the goddess of prosperity, when merchants and bankers count their wealth and worship it. It is said that Vishnu killed a giant on that day, and the women went to meet him with lighted lamps. In memory of this lighted lamps are displayed from all houses, and are set afloat in rivers and in the sea, and auguries are drawn from them according as they remain lit or are extinguished.

HINDU RULE IN INDIA

The settlement in North India of the Aryans, whose social system slowly developed into what is now known as Hinduism, took place gradually between 2000 to 900 B.C. The earliest colonies were made in the Panjab and in the valleys of the Jumna and the Ganges. When the work ascribed to Manu assumed its present shape (about 200 or 300 A.D.), the whole space between the Himalayas and the Vindhya was acknowledged to be Aryan territory. The ideas and customs of the invading race spread all over India; and though the Dravidian South has remained mainly aboriginal, it has been gradually absorbed within the Hindu pale. Of both the stocks which combine to make the mass of the Indian people, there were many Ruling Houses, most of which, from the time of Buddha and Alexander, are known to us from one source or another, but hardly one of them has left any substantial memorials, if the Buddhist relics of antiquity and a few Hindu temples be excepted. Indeed, it is one of the curious facts of the East that, while the people are so immutable, the dynasties are extraordinarily ephemeral. The mention of only a few of the principal dynasties which ruled in the fifteen hundred years previous to the Muhammadan invasions would include the Saisunagas, the Nandas and the Mauryas of the Ganges Valley, the Saka dynasty of Kanishka, and the Guptas of Pataliputra. The Gupta period may be justly regarded as the Golden Age of Northern India, and an Emperor of this line, Chandragupta II., surnamed

Vikramaditya, is probably the original of the Vikramaditya of legendary celebrity. At the beginning of the 7th century, Harsha, one of the notable names in Indian history, established himself as the undisputed master of Northern India, acknowledged from Gujarat in the West to Assam in the East. The whole period between the death of Harsha in 647 A.D. and the Muhammadan conquest of Hindustan at the close of the 12th century may be called the Rajput period, and one of the outstanding names of the period is that of Raja Bhoja, of Dhara, in Malwa. The principal Southern dynasties were the Andhras, who held the Deccan till about 236 A.D.; the Chalukyas of Vatapi (Badami in the Bijapur district); the Rashtrakutas of Nasik and Manyakheta; and the three sister kingdoms of the Pandyas, the Cheras, and the Cholas in the extreme South. All these dynasties have passed away; and now, in the 20th century, the oldest Hindu Ruling Houses in India, those of Rajputana, can trace the origin of their present States only from about the 11th or 12th century, while the beautiful capitals of these States are nearly all of a much later period, Jodhpur and Udaipur dating from the middle of the 15th and 16th centuries. Partly owing to the protection afforded by the desert country which surrounds them, and partly owing to their strong feudal organisation, the Rajput States maintained a really independent position during the first three centuries of Muhammadan rule, and were able to secure one of subordinate independence under the Mughal Emperors. While the other Hindu Kingdoms of India were being gradually conquered, and the minor Muhammadan States absorbed, it is the proud boast of the Ranas of Udaipur that their line alone preserved their independence even in the days of the Mughals. Just when this process of absorption must have seemed to the ruling race to be complete, the ruthless treatment of the Rajputs and Marathas by the Emperor Aurangzeb evoked an outburst of Hindu feeling which proved the principal cause of the downfall of the Mughal Empire. The older-fashioned chivalrous temperament of the Rajputs was, however, no match for the vigour and hardihood of the Marathas; and when British interference practically checked an Imperial Maratha domination in India, it also saved the Rajputs from destruction. Of the other great Hindu Ruling Houses of India now existing, Mysore was restored by the British Power at the end of the 18th century, while the State of Jammu and Kashmir was created in 1846, at the close of the first Sikh war. The Sikh States, which date from the middle of the 18th century, owe their present existence to British protection against Maharaja Ranjit Singh, and the great Maratha States are of but slightly longer pedigree than these. The older and remote States of Travancore and Cochin would inevitably have fallen to the

Mysore Muhammadan dynasty had that survived, or to the Marathas, but for the advent of the British power.

THE SIKHS

THE Sikhs¹ are a reformed sect of Hindus who follow a teacher named Nanak, born near Lahore in 1469; they are not a race, but a brotherhood. The word Sikh means a "disciple" of the Guru or teacher. Nanak's teaching was a reformation of Hinduism combined with various foreign elements. All the Gurus inveighed against caste; Guru Govind finally abolished it, established the Sikh religion on a political and military basis, proclaimed as the depository of the principles and doctrines of the Sikh religion the Granth, or holy book, which is now the principal object of the Sikh devotions, and definitely established the Khálsa, as the Sikh brotherhood is called (see p. 306). (Khálsa is from the Arabic *Khális*, which means pure, and was meant by the Guru to indicate the purity of his faith.)

In the middle of the 18th century the Sikhs, who had been gradually rising into power, struggled with the Afghans for supremacy in the Panjab and finally won it. In 1715 Banda had been tortured to death by the Mughals; and in 1763 they avenged his fate by destroying Sirhind utterly. Banda was not a Guru; he was an agent sent by Guru Govind Singh from the Deccan to avenge the indignities offered to the Sikhs by the Muhammadans. Sirhind was the place where two of Guru Govind's children were barbarously put to death. The next year, in 1764, they fought a long and doubtful battle with the Afghan Ahmad Shah Durani in the vicinity of Amritsar, and on his retirement they took Lahore, which soon became the centre of their power, Amritsar being the religious centre. The government was at first in the hands of a number of *misl*s, or confederacies, which were gradually absorbed by Ranjit Singh of the Sukarchakia Misl, who finally became Maharaja and the head of the Sikhs. Ranjit Singh died in 1839, and his son Kharak Singh and his grandson Nao Nihal Singh died in November the next year, the latter from injuries received from the fall of a gateway as he was returning from the funeral of his father. After an interval Maharaja Sher Singh became ruler of Lahore, and was murdered in September 1843 by the Sindhanwalia Sirdars, who also killed the Prime Minister, Raja Dhian Singh, of Jammu; and upon this Dhalip Singh, a putative son of Maharaja Ranjit Singh, succeeded. His mother, Rani Jindan, attempted to rule through Hira Singh, son of Dhian Singh, Jowahir Singh, her brother, and Lal Singh, her lover, but the first two of these were murdered, and the real power in the State rested with the army

¹ Pronounced like "seeks"; but, more correctly, "sicks."

and with Raja Gulab Singh, of Jammu. To relieve themselves of their embarrassments with the former, the Rani and her counsellors encouraged a war with the British, against whom various causes of complaint were alleged, and finally, the army breaking away from all control, crossed the Sutlej at Hariki early in December 1845, and invaded the territory to which the British asserted their rights. Upon this followed the First Sikh War, which was ended by the battle of Sobraon on 10th February 1846 (p. 354), the Jullundur Doab being annexed to the British possessions, and Kashmir being transferred to Gulab Singh, grandfather of the present Maharaja, upon payment by him of the war indemnity. The administration of the rest of the Panjab was placed under a council of regency on behalf of the minor Maharaja Dhalip Singh, subject to the advice of the Resident in Lahore, first Sir Henry Lawrence and then Sir Frederick Currie. Matters were progressing as well as could be expected when the incident of Multan (p. 402) occurred on 20th April 1848, upon which the Sikh soldiery and people rose in defence of their national cause. Serious operations against them were not taken till December, when, after unsatisfactory skirmishes at Ramnagar and Sadulpur (22nd November and 3rd December 1848), the Battle of Chilianwala was fought on 13th January 1849 (p. 372), and the victory of Gujrat (p. 371) was won on 21st February. Since then the Sikhs have been among the most loyal subjects of the Indian Empire, of which they proved the main support in 1857, and provide some of the best recruits of the Indian army. But the present century has seen the development of a strong communal spirit among the Sikhs, based on memories of former political supremacy and fostered by modern political movements in India. More especially a demand is made for the reformation of Sikh religious institutions. This led to disturbances raised by a section of Sikhs who adopted the name of Akali, a traditional name for Sikh devotees. These disturbances ceased with the passing of the Sikh Shrines Bill in 1925.

The following is a chronological table of the ten Sikh Gurus.

	BORN.	GURU.
1. Nanak, founder of the Sikh sect	1469	till he died, 1538
2. Angad	1504	1538-1552
3. Amar Das	1509	1552-1574
4. Ram Das, builder of the original lake-temple at Amritsar	1534	1574-1581
5. Arjan Mal, compiler of the Adi Granth	1563	1581-1606
6. Har Govind, first warlike leader	1595	1606-1645
7. Har Rai, his grandson	1630	1645-1661
8. Har Krishna, died at Delhi	1656	1661-1664
9. Tegh Bahadur, put to death by Aurangzeb	1622	1664-1675
10. Govind Singh remodelled the Sikh Govern- ment; assassinated at Nander (p. 86)	1666	1675-1708

Guru Govind refused to name a successor. He said : "He who wishes to behold the Guru, let him search the Granth." Banda, who was put to death in 1715 by the Emperor Bahadur Shah, was not a Guru.

The Sikhs are known now either as Malwai (which comprises those S. and E. of the Sutlej and Beas) or Manjha (lying N. and W. of these, in the Bari Doab between the Sutlej and the Ravi). They are represented among the ruling Chiefs of India by the three Phulkian houses, of which the Maharaja of Patiala and the Rajas of Jind and Nabha are the heads, and by the Rajas of Kapurthala and Faridkot, the first three and the last in the Malwai country and the fourth in the Jullundur Doab. The present ruling family of the Jammu and Kashmir State, which is Dogra Rajput by descent, is no longer Sikh by religion. It should be remembered that a Sikh is not necessarily born of that religion, but is baptized into it when of adult age, and that in consequence some of the sons of Sikhs fall back into the Hindu religion by simply not taking the *pahal*, as the initiatory rite, usually performed at the Amritsar temple, is called. The greater proportion of the Sikhs are called Sahijdhari (those who live at ease and practise trade or agriculture), and are not baptized at all. They do not consider it necessary to wear the habiliments of the Sikhs.

Orthodox Sikhs are distinguished by the five *kakkars*—uncut hair (*kesh*), short drawers (*kachh*), iron bangle (*kara*), wooden comb (*kanga*) and iron-handled knife round which the hair is rolled (*kirpan*).

In his work on *The Sikh Religion* (6 vols., Oxford, 1909), Mr M. A. Macauliffe wrote—"To sum up some of the moral and political merits of the Sikh religion : It prohibits idolatry, hypocrisy, caste exclusiveness, the concremation of widows, the immurement of women, the use of wine and other intoxicants, tobacco-smoking, infanticide, slander, pilgrimages to the sacred rivers and tanks of the Hindus ; and it inculcates loyalty, gratitude for all favours received, philanthropy, justice, impartiality, truth, honesty, and all the moral and domestic virtues known to the holiest citizens of any country." According to the census of 1921, the Sikhs in India numbered 3,238,803, of whom 2,294,207 were in the Panjab, 813,089 in the Panjab States, and 39,507 in Kashmir.

THE MAHRATTAS (MARÁTHAS)

ANOTHER remarkable people in India who deserve brief notice are the Mahrattas, who derive their name from the country of Maharashtra, which they occupied in the early Aryan days. They had been noted as a fighting race in the armies of Ahmadnagar and Bijapur before

they came prominently to notice as the opponents of the Mughals in the person of their famous leader Sivaji (1627-80), who set the example of ravaging distant territories by his raid on Surat in 1664 (p. 193). His son Sambhaji was captured, blinded, and executed by the Emperor Aurangzeb; and his grandson Sahu, who was brought up by one of the daughters of that Emperor, proved when released to have none of the hardy Mahratta qualities, and abandoned all power to his Minister, a Konkan Brahman of the name of Balaji Vishvanath (who became the first Peshwa), and sank to the rank of Raja of Satara. The first Peshwa marched to Delhi in 1718, and in 1720 obtained the right of "chauth"—the famous Mahratta demand of one-fourth of the revenues of every country which they could dominate—over the Deccan. The second Peshwa, Baji Rao I. (1721-40), seized Malwa, which was ceded to the Mahrattas under his successor, Balaji Baji Rao (1740-61), under whom Janoji, son of Raghoji Bhonsla, the Chief of Nagpur, and then the leading Mahratta feudatory, invaded Bihar and Bengal, and obtained a cession of Orissa, and of the chaith of Bengal from the Murshidabad Viceroy, Ali Vardi Khan. During his life, which is believed to have been terminated by grief at the crushing defeat of the Mahrattas at Panipat by Ahmad Shah Durani, the Gaekwar and the Holkar and Scindia Chiefs came to the front; and his son Madho Rao (1761-72) was rather the head of five separate branches of the Mahratta people than of the people as a whole. The Gaekwars extended their power through Gujarat and the north of Bombay, and Scindia and Holkar established themselves in Malwa, and gradually enlarged their authority over Rajputana and the Ganges Doab, with the capitals of Agra and Delhi. The Mahrattas overran Rohilkhand (1771-73), which was the remote cause of the famous Rohilla War. The titular Emperor of India, Shah Alam, placed himself in the hands of the Mahrattas in 1771, and remained under the control of Scindia till 1803. The sixth Peshwa, Madho Rao Narayan, (1774-95), who succeeded as an infant, was practically superseded by his Minister, Nana Farnavis: it was the war of succession between him and his uncle Raghoba which led to the first interference by the British in Mahratta affairs and the First Mahratta War in 1775-82. The last Peshwa, Baji Rao II., nominally ruled from 1795-1818. The Mahratta Princes forced him into war with the English, and in the campaigns which ensued in 1803-4 Scindia and the Bhonsla Chief were destroyed in the South at Assaye (23rd September 1803) and Argaum (28th November 1803), while Scindia's forces in the North were crushed at Delhi (11th September 1803) and Laswari (1st November 1803), and Jaswant Rao Holkar was defeated at Dig (23rd December 1804), and finally compelled to submit. The last

general Mahratta war took place in 1817-18, in which the Peshwa was defeated at Kirkee (5th November 1817), the Bhonsla Chief at Sitabaldi (26th to 27th November 1817), near Nagpur, and Holkar at Mahidpur (21st December 1817). The Peshwa was deported to Bithur, near Cawnpore, and died there in 1853; his adopted son, the Nana Sahib, stands for ever infamous as the author of the Cawnpore massacre of 27th June 1857.

It will be seen from the foregoing narrative that it is the Mahrattas and not the Moguls who are the forerunners of the British in the overlordship of India. The story of their rise to power presents many remarkable features. Whereas in Malabar, on the other side of the mountain wall of the Western Ghats, Brahman supremacy exists in its most extreme form, the Mahrattas have never exhibited any caste exclusiveness. Sivaji, it is true, found it necessary to obtain from a Brahman pundit at Benares a pedigree which established his descent from the Sun and declared him to be a Kshatriya of the purest breed; but resort was had to this expedient simply because Brahman prejudice refused to tolerate the coronation of a Sudra, or base-born king. A Sudra he undoubtedly was, and like the great mass of the Mahratta people, a *kunbi* or cultivator by caste. The Mahratta chieftains who carved out for themselves kingdoms in Malwa and Gujarat were Sudras also. The original Scindia was a *kunbi* and started life as a slipper-bearer. The Gaekwar of Baroda is a member of the *gauli* or cowherd caste and Holkar is a *dhangar* or shepherd. It is the great merit of Sivaji in Hindu eyes that he challenged the Brahman monopoly and showed that a Hindu upheaval was possible in which all classes could unite on the basis of a common patriotism against the Muhammadan intruder. Fortune favoured him from the first. Akbar had rested his rule upon the co-operation of his Hindu subjects; the austere fanaticism of Aurangzeb undid his work, and the Mogul Empire was already tottering to its fall when Sivaji burst upon the scene in the middle of the seventeenth century. Henceforward, until the third battle of Panipat in 1761, the star of the Mahrattas was in the ascendant: and three hard-fought campaigns were needed before the British could wrest supremacy from them. But the seeds of disintegration had been sown within fifty years of the death of Sivaji. Caste jealousies rendered impossible any real community of action between the Mahratta chiefs and the Brahman Peshwas at Poona. As Rabindranath Tagore has said (*Modern Review*, April 1911), "a temporary enthusiasm sweeps over the country, and we imagined that it has been united: but the rents and holes in our body-social do their work secretly. . . . Shivaji wove ropes of sand: he attempted the impossible." Moreover, an Empire nourished on predatory warfare could possess no stable basis. But

although the Empire has vanished, its memories live in Maharashtra. The cult of Sivaji has become a leading feature of the Nationalist movement in Western India, and especially at Poona, where a statue was unveiled in 1928. His exploits are still recited by the *gondhali* or wandering minstrel to rapt village audiences—and lose nothing in the telling. The Mahrattas have retained their martial qualities, as the achievements of the Mahratta regiments during the Great War have shown. Their chief defect has been their lack of business capacity. They have not produced any great bankers, traders, or captains of industry (as Prof. Jadunath Sirkar has observed in his admirable *Life of Sivaji*). Some of them are learned scholars and others are highly educated and advanced politicians, but in the main they are still, as they always were, a race of sturdy agriculturists.

Besides the great Mahratta States of Baroda in Gujarat, and Gwalior, Indore, Dhar and Dewas in Central India (where the actual Mahratta population is small), the remnants of the Mahratta hegemony survive in the cluster of petty states in the so-called southern Mahratta country where the prevailing language happens, as a matter of fact, to be Kanarese. The Sar Desai of Sawantwari, a state which lies to the north of the Portuguese territory of Goa, represents a family which was always a thorn in the side of Sivaji. The Pant Pratinidhi of Aundh and the Pant Sachiv of Bhore perpetuate by their names the offices held by their ancestors at the Mahratta Court. The Bhonsla dynasty at Nagpur died out in 1853 on the death of the successor of Appa Sahib (p. 138) who had been deposed. The royal house of Satara which was descended from Sivaji himself came to an end in 1848, but the Maharaja of Kolhapur is of the same blood and enjoys the title of Chhatrapati or "Lord of the Umbrella," which was assumed by the hero at his coronation. Mahratta colonies are also to be found in several of the districts of the Madras Presidency. The Raja of Sandur in the Bellary district comes of Mahratta stock, and as recently as 1845 the descendants of Sivaji's half-brother Vyankoji were reigning in empty state at Tanjore.

THE RAJPUTS

ALTHOUGH, like the Mahrattas, the Rajputs are Hindus, they have an equal title to separate notice as one of the historic races of India.

Their annals are a veritable mine of feudal romance and knightly chivalry. "There is not a petty State in Rajputana which has not had its Thermopylæ," writes their chronicler, Colonel James Tod, "and scarcely a city which has not produced its Leonidas."

Of the several States within the area known as Rajputana, Jaisalmer, Jodhpur or Marwar, and Bikaner, form a group on the west

and north. Alwar lies likewise to the north. In the east and south-east are Jaipur, Bharatpur (Bhurtpore), Dholpur, Karauli, Bundi, Kotah, and Jhalawar. Those in the south are Partabgarh, Banswara, Dungarpur, and Udaipur or Mewar, with Sirohi on the south-west. The British province of Ajmer-Merwara, of which the Agent to the Governor-General is the Chief Commissioner, occupies the centre, and is surrounded by the State of Kishangarh, the chiefships of Shahpura and Lawa, and parts of the Muhammadan State of Tonk. With the exception of Bharatpur and Dholpur, whose rulers are Jats, and Tonk, the princes are all Rajputs. The ruling families of the majority of the States in Kathiawar (which lies to the west) are also Rajputs. The Jareja clan is represented in Cutch, Morvi, Gondal and Nawanagar (whose ruler Maharaja Jam Sahib Sir Ranjitsinhji was so familiar a figure in English first-class cricket before he ascended his throne). Other clans are the Gohels (Bhaunagar and Palitana), the Jethwas (Porbandar) and the Jhalas.

Udaipur (Mewar), Jodhpur (Marwar), Jaipur and Bundi are the four original great States of Rajputana proper. Descent from the Sun is claimed by the Maharana of Udaipur who is head of the Sesodia clan, and there is no blood in India which is bluer than his. To him is conceded by common consent the pride of place among Rajputs. He shares with the Maharawal of the desert State of Jaisalmer, who is the chief of the Bhatti Rajputs, the distinction of belonging to a dynasty which in defiance of eight centuries of foreign domination, holds sway over the lands won by the strong arm of his ancestor. His is the only clan which never gave a daughter in marriage to the Moguls at Delhi. The city of Udaipur, in spite of modern improvement, is a dream of beauty; but it is round the fortress of Chitor, sixty-nine miles away, that the legends of a glorious past imperishably cling. Three times did Chitor suffer the horrors of sack; and every incident connected with these disasters is typical of the indomitable Rajput spirit. Time after time, when all hope was lost, the fatal *johar* was commanded. The women committed their bodies to the flames, and the men, arrayed in bridal robes of saffron, sallied out and died fighting. The last conqueror of Chitor was Akbar in 1567. Thirty thousand of her inhabitants fell on that day: and the invocation of "the sin of the slaughter of Chitor" still exercises a binding spell upon every Rajput. But although overwhelmed the men of Mewar remained undismayed: calamity was made a whetstone to courage. In fulfilment of the vow made by his great forbear Rana Pratap Singh in the time of his tribulation, the Maharana may not set foot in Delhi: his beard is untouched by the shears, and leaves are placed beneath his plate, and straw under his bed, as a mark of fallen fortune.

Even when the Rajput was compelled to make a virtue of necessity and give his daughter in marriage to the Mogul, as in the case of the Rathor princes of Jodhpur, the personality of the Hindu was never submerged. Some of the most celebrated Emperors, such as Jahangir, Shah Jahan, and Aurangzeb, were the sons of Rajput princesses.¹ The most brilliant conquests of Akbar Jahangir and Aurangzeb were made by their Rajput allies. To the same royal house as Jodhpur belong the Maharaja of Bikaner, who represented India so ably at the Peace Conference at Versailles and the Maharaja of Idar, whose State is in Mahi Kantha in the Bombay Presidency, on the western border of Rajputana. In our own day the soldierly tradition of the Rathors have been nobly upheld in the veteran Sir Partab Singh, Maharaja of Idar and thrice Regent of Jodhpur.

The Maharaja of Jaipur is the head of the Kachhwaha Chauhans. The beautiful ruined city of Amber was once the capital of the State, but Jaipur has taken its place since 1728, when it was founded by the famous Maharaja Jai Singh who ruled from 1699 to 1744. No lesser place in history has been won by Maharaja Man Singh (1592-1615) who took Arakan, Orissa, and Assam, and held in succession the governments of Bengal and Bihar, the Deccan and Kabul. The story goes that Akbar died of a poisoned confection which he had prepared for his too powerful subject.

The Maharao Raja of Bundi is the chief of the Hara Chauhan Sept, who, like the Kachhwahas, are *agnikula*, or "children of the fire-pit." His State is remote from the railway and is rarely visited: but the late ruler had the honour of receiving Her Majesty Queen Mary in 1912. The royal durbar dress is most picturesque, and is distinguished by a wide pleated skirt. A sister State is Kotah, which separated from Bundi in 1572. From 1771 to 1824 the reins of authority in Kotah were in the hands of the Regent Zalim Singh, the blind Machiavelli of Rajputana, who during his long life of four-score years could always say "my secret is my own."

Such are some of the Rajput States ruled by Rajputs. They are among the most enlightened, as they are the most chivalrous of the princes of India. The British Raj has no firmer friends. The Bikaner Camel Corps, the Jodhpur Lancers, and the Jaipur Transport Corps—to name only a few—rendered yeoman service during the Great War, side by side with the Rajput regiments of the Indian Army. *Fais ce que dois advienne que pourra* has been the Rajput motto throughout the ages.

¹ Aurangzeb, in spite of his orthodoxy, also married a Rajput princess. Of the twelve Emperors who succeeded Akbar, six had Hindu mothers.

THE PARSIS

THE Parsis, formerly inhabitants of Persia, are the modern followers of Zoroaster, and now form a numerous and influential portion of the population of Surat and Bombay. Of their total number—101,778 in India in 1921—83,019 were in the Bombay Presidency and nearly 14,000 in Native States, of whom nearly 8000 were in the Baroda State and nearly 2500 in Bombay States. Their chronology dates from 10th June 632 A.D. The Parsi year 1295 corresponds to 1926 A.D.

When the Sassanide Empire was destroyed by the Muhammadans in 651 A.D. the Zoroastrians were persecuted, and some of them fled (c. 717) to India—first to Diu, in Kathiawar, then to Sanjan, about 25 m. S. of Daman, where the ruler of Gujarat became their protector, and for some hundreds of years they lived there and in the neighbourhood in peace and quiet, finally making Navsari their headquarters. In the 16th century they suffered considerably from Muhammadan persecution until the time of the British occupation. The sacred fire, which Zoroaster was said to have brought from heaven, is kept burning in consecrated spots, and temples are built over subterranean fires. The priests tend the fires on the altars, chanting hymns and burning incense. They do not worship the sun or fire, as is often commonly supposed. "God, according to Parsi faith, is the emblem of glory, refulgence, and light, and in this view a Parsi while engaged in prayer is directed to stand before the fire, or to direct his face towards the sun, as the most proper symbols of the Almighty." There are fire-temples in Bombay for public worship. The Dasturs are their high priests. A partially successful attempt was made in 1852 to restore the creed of Zoroaster, which had become corrupted by Hindu practices, to its original purity. In order not to pollute the elements, which they adore, the Parsis neither burn nor bury their dead, but expose their corpses to be devoured by birds (see "*Towers of Silence*,"¹ Bombay, p. 25). They have been quick to adopt Western ideas, while in many respects maintaining scrupulously their own manners and customs. This has been noticeable in the matter of education, especially female education; and this, coupled with social freedom, has given Parsi ladies in the past an advantage. The Parsis were the first to take up cricket. They largely follow commercial pursuits, in which they are most enterprising and successful. Their charity is well known. Benevolence is their first principle; but it is not restricted to their own community.

¹ The vernacular name of these structures is Dokhma.

PARSI FESTIVALS

Pateti, New Year's Day—the 1st of Farvardin (approx. September). The Parsis rise earlier than usual, put on new clothes, and pray at the fire-temples. They then visit their friends and join hands, distribute alms, and give clothes to servants and others. This day is celebrated in honour of the accession of Yezdajird to the throne of Persia, 632 A.D.

Farvardin-Jasan, on the 19th of Farvardin, on which ceremonies are performed in honour of the dead, called Farohars, or “protectors.” There are eleven other Jasans in honour of various angels.

Khurdad-sal, on the 6th Farvardin, the birthday of Zoroaster, who is said to have been born 1200 B.C. at the city of Rai, or Ragha, near Teheran ; but the date of Zoroaster has not been authentically fixed.

Jamshidi-Nauroz, held on the 21st of Mihr (approx. March). It dates from the time of Jamshid, and the Parsis ought to commence their New Year from it.

Zurtoshte Diso, held on the 11th of Deh (approx. June) in remembrance of the death of Zartasht, or Zoroaster, in Bactria.

The Muktd, held on the last ten days of the Zoroastrian year, (Sept.-Aug.) including the last five days of the last month and the five intercalary days called the *Gatha Gahambars*. A clean place in the house is adorned with fruits and flowers, and silver or brass vessels filled with water are placed there, and ceremonies are performed in honour of the souls of the dead.

THE BRAHMO SAMAJ

THE Brahmo Samaj represents the Theistic movement in India. It originated in Calcutta, and was formally inaugurated by Raja Ram Mohan Roy in 1830. One effect of early English education in India was to unsettle the minds of young men and shake their belief in orthodox Hinduism, and many of them drifted into atheism or agnosticism. The Raja, who was a man of commanding intellect and great piety, and was not only learned in the Hindu Scriptures, but had also studied the Bible in the original Hebrew and the Koran in Arabic, established the Brahmo Samaj on an eclectic basis, accepting what was best in all great religions, but drawing his inspiration mainly from the *Upanishads*. He left for Europe in 1831, and died there in 1833. The movement languished for a time, until in 1843 it was joined by Debendra Nath Tagore. He was intensely spiritual, and under his long leadership the Brahmo Samaj prospered, and branches were formed in various provincial centres. Keshab Chandra Sen became an adherent in 1857, and gave a fresh

impetus to its activities. He was greatly influenced by the Bible, and introduced a definite programme of social reform. In 1862 he was ordained a minister of the Calcutta Brahmo Samaj. He was full of missionary zeal, and preached in different parts of India. His advanced views on social questions were not shared by Debendra Nath Tagore, and in 1866 he seceded and founded the Brahmo Samaj of India. Under his inspiring leadership the movement extended to Bombay, Madras, and the Panjab. In 1870 he visited England, and met with a cordial welcome from churches of all denominations. In 1872 he was instrumental in getting the "Native Marriage Act" passed to legalise inter-caste marriages. There was a further schism in 1878, when a large body of prominent Brahmos separated from Keshab Chandra Sen (who died in 1884), and the Sadharan Brahmo Samaj was duly organised, Keshab Chandra Sen's church being henceforth known as the New Dispensation. According to the census of 1921 there are 6388 Brahmos in India. The number is small, but it includes many men and women of culture and position. The influence of the Brahmo Samaj is widely felt, and it is doing much to liberalise orthodox Hinduism and encourage social reform.

BUDDHISM AND THE BUDDHISTS

OF the 11,571,268 (1921 census) Buddhists in India, 11,201,943 are in Burma; 265,604 are in Bengal; 37,685 in Kashmir; 26,788 in Sikhim; 13,162 in Assam. In Ceylon they number 3 millions out of a population of 4½ millions. Outside the Bengal district of Darjeeling and Kashmir, it will therefore be in Burma and Ceylon that the visitor is likely to come across Buddhism. The best account of the Buddhist religion as it actually affects the lives of the Burmese, is in Sir J. G. Scott's work, *The Burman, His Life and Notions* (Macmillan, 1910). The Pali Text Society is doing much for the elucidation of Buddhism by publishing original Pali works and some translations.

Buddhism is too vast a subject to be treated exhaustively in a few pages, but some notice of so widespread a religion is required. The history of the founder of Buddhism, the doctrines, the development and decadence of the religion, and its present circumstances, may be briefly stated.

Siddhartha Gautama, afterwards called Buddha (the Enlightened), or Sakyamuni, the sage of the Sakyas, belonged to the Kshatriya or warrior caste, and was the son of Suddhodana, ruler of the Sakya clan, settled around Kapilavastu, in the Nepalese Tarai, N. of the Basti district of the United Provinces. The year 563 B.C. has been suggested for his birth at the Lumbini garden, the modern Rummindei,

near Kapilavastu, and 483 B.C. as the year of his death (p. 697 of *Cambridge History of India*, Vol. I., *Ancient India*, 1922).

The story of his life is contained in the sacred literature of the Buddhists, undoubtedly based on truth, though enveloped in a mass of legend. The sacred literature means the Pali Canon called the "Three Pitakas, or Baskets," besides subsequent commentaries. It contains the alleged genuine sayings of the Buddha and the moral and religious principles of Buddhism. Among the works in the Canon are the Sutras (or Suttas), the dialogues, the Dhammapada, the Jatakas, the Buddhist psychology, etc. Pali (the "Text") was a literary version of an Aryan dialect, later than the Vedas, earlier than classical Sanskrit. It had ceased to be a vernacular, but was the religious literature of Ceylon, Siam, and Burma, written on palm-leaf manuscripts. At the age of twenty-nine Gautama made "the great renunciation" of the world and its pleasures. Much troubled by the spectacle of human suffering—age, disease, and death—and impressed by the sight of a peaceful saint, he decided to leave his happy home, his loved wife, and his lately born child, and surrender himself to the search of mental peace. Cutting off his long hair and changing his princely raiment, Gautama left the palace suddenly and secretly in ragged garments. As a disciple of two celebrated Brahman sages, he strove to content himself with their teaching and severe self-mortification; the strict austerities he practised produced no peace of mind or divine enlightenment—only great bodily weakness and a conviction of their inutility. So he abandoned penances, and sat in meditation under the Bo-tree, the "tree of knowledge," at Buddh Gaya, where he was tempted by Mara, the personification of carnal desire, to return to the world; but he resisted, and became the Buddha—the Enlightened.

Repairing to Benares, he preached his first sermon on "The Foundation of the Kingdom of Righteousness," commemorated by the Dhamek Stupa at Sarnath, and henceforth devoted his whole life to teaching. In the kingdom of Magadha (now Bihar), where he travelled, he was received with great reverence and hospitality by all classes. Sometimes the King, or another wealthy donor, would build a residence for the Teacher. His disciples formed, under rules framed by the Master, the community of mendicants (Bhikshus) from which the great monastic organisation, called the *Sangha*, was developed. Places such as Lumbini and Buddh Gaya and his temporary residences became sacred spots. At nearly eighty he died at Kusinagara, modern Kasia, in Gorakhpur District. The ceremony of burning his body was conducted with pomp, as for a King, and his ashes were divided, as precious relics, among the chief people to whom he had preached. Part of these have recently

been discovered at Peshawar (p. 384) and at Piprawa (p. 475); the ashes at the latter place have been judged from the inscription on the vase to be the relics of the Sakya Ruling Family. At his death Buddhism was the reformed religion of a sect, prevalent within the limited area of his preaching; it was maintained by the organisation of the *Sangha* until the day of its expansion dawned.

Only a summary of the philosophical doctrines of Buddhism can be attempted here. But some knowledge of its character as a religion is essential for an understanding of a great period of ancient India.

In the Buddhist religion the personality of the Buddha is predominant. No Supreme God is admitted in the system. The Buddha, as the teacher of the truth, and therefore the guide and saviour, is the central object of faith and devotion. By his doctrine the work of salvation is limited to human agency—that is, the human mind can achieve omniscience, and human nature arrive at absolute perfection; its purpose was to lead men to a higher life. Human and animal happiness were its avowed object as a practical religion. It had a kindly spirit, and a central tenet is to keep to the “middle path” between worldliness and asceticism. Buddha, it is believed, taught that all life is suffering; that suffering arises from indulgence in desires, especially the longing for continuity of life; and that the only hope of relief lies in the suppression of sensual passions and every attachment, in Nirvana, the highest bliss—meaning, not the extinction or negation of being, but the extinction, the absence, of passionate desire, the goal by which union with the perfect good is obtained. Ignorance, delusion, and anger, are also fundamental evils and hindrances that must be completely destroyed by intense and continuous mental discipline. Each man must depend on himself and his own efforts towards intellectual and spiritual clearness. Each man must purify his life, grasp the law of causes, perceive the sorrow of existence, the impermanence of all states, and cease to believe in any “soul” apart from the elements which make up the individual and are dissolved at his death. Rewards and punishments, strictly speaking, do not come into the creed, but the inexorable working of cause and effect proceeds without a break, and thus good and evil done in one life bear fruit in the next. The connection between the lives is not the transmigration of a soul but the *Karma* (action), the force that passes on and causes the newly assembled elements of existence to form a new being living on earth or in one of the heavens or hells according to the acts and intentions of a former life, for those constitute the individual’s *Karma*. A man’s object should be to hear somewhere, at some time, the teaching of a Buddha and become enlightened by meditation and introspection, so as to earn a cessation

of the cycle of lives through which he would otherwise be destined to pass, and thus finally to reach Nirvana, the sinless, calm state of mind in which there is no renewed individual existence. Thus the final death, with no new life to follow—as there is no soul which continues to exist after death—is a result of Nirvana, but it is not Nirvana. All men are capable of attaining Nirvana, without distinction of caste, and neither sacrifices nor bodily mortifications are of any avail. To attain salvation by obtaining freedom from delusions, the Buddhist must follow the eightfold path and pass through four stages of higher and higher saintliness. This, the Noble Path, is the very pith of Buddhism, by which alone the Buddhist can reach *Arhat*, the state of salvation, the state of a man made perfect. The Buddha himself is believed to have passed through a great number of existences in the course of the preparation for his final mission. The legends of these lives of Gautama are the famous *Jataka* tales which have formed the subjects of many ancient sculptures, paintings, and literary works of Buddhist countries.

The principal virtues inculcated by Buddhism are charity, compassion, truthfulness, chastity, respect for the *Sangha*, and self-restraint in regard to all the ambitions, pleasures, and attachments of life. The stricter code—the ten precepts—is binding on the religious order: only the first five precepts are binding on the laity. They are practical rules forbidding (1) the destruction of life in any form, (2) theft, (3) unchastity, (4) lying, (5) indulgence in intoxicating drinks, (6) eating at forbidden hours, (7) frequenting performances, (8) use of unguents and ornaments, (9) use of a large or ornamented couch, (10) accepting money.

Extreme asceticism and every kind of self-torture are contrary to the teaching of Buddhism as practised by the religious orders.

The Buddhist doctrine has been called a pessimist and atheist creed, with some excellent moral rules attached. But in reality it is not pessimistic, as it teaches the assurance of being able to put an end to sorrow, and infinite opportunities for beginning again after failure. Buddhism is “the embodiment of the eternal verity that as a man sows he will reap, associated with the personal duties of mastery over self and kindness to all men; and quickened into a popular religion by the example of a noble and beautiful life” (Sir W. W. Hunter).

The Buddhist ideal is lofty, and has done much for Oriental civilisation wherever it has prevailed. In practice the religion has been adapted to the needs of believers of many races, and prominence was given from early times to almsgiving and acts of piety, such as the building of shrines and monasteries. Faith in, adoration of, and meditation on, the Buddha are of great efficacy. Even in the earliest teaching the presence of a Perfect Buddha in the world is held to

be indispensable for the teaching of the truth. Gautama is said to have been preceded by other Buddhas in past ages, and a future Buddha, Maitreya, is looked for. The more austere and rationalistic ideas of *arhatship* (saintliness) and *Nirvana* (cessation of sorrow by destruction of craving), as taught in the earlier phases of Indian Buddhism, developed afterwards into the vast and glowing conceptions of Mahayana Buddhists, multiplying Buddhas and Bodhisattwas (predestined Buddhas), and carrying the notion of *Nirvana* far beyond *arhatship*—the point where the Hinayana Buddhism stops. These ideas are expressed in Sanskrit literature and indicated to some extent in Buddhist art. The greatest Indian representatives of the Mahayana flourished in the first few centuries of the Christian era. In a yet later and debased Buddhism hardly any of the old virtue or rationalism can be traced. But the early art and principal Buddhist literature of India are inspired by a beautiful devotion and a reasonable morality. A summary of the spirit of Buddhism can be seen clearly set out in translations of the Dhammapada (the way, the state, the path, the footsteps of religion).

The day of expansion of Buddhism dawned when Asoka (274 to 237 B.C., p. 698 of the *Cambridge History of India*, vol. 1, 1922), the third Mauryan King of Magadha, came under its influence, visited the Buddhist holy places, propagated and enforced the Buddhist Law of Piety, issued his rock-cut edicts, ordered that the sacred books should be collected, and was ordained as a monk. He ruled over the whole of India up to the Hindu Kush mountains and north of a line drawn W. from Nellore. Literature, civilisation, and culture combined to develop the religion; monks and nuns and laity alike could join the *Sangha*. Specimens of his rock edicts, inscribed under his title of Priyadasi, exist still at Girnar (p. 242), at Dhauli, near Bhubaneswar (p. 510), and at Shahbazgarhi, close to Hoti Mardan (p. 383); monolithic columns, lats, erected by him, with a portion of the edicts, may be seen at Allahabad (p. 51) and at Delhi (pp. 308-9). These edicts, deciphered by the genius of James Prinsep, embody for the most part the moral rules of Buddhism; they forbid the shedding of blood, inculcate obedience to parents, almsgiving, charity, mercy to all living creatures, respect for teachers, support of religious instructors; they refer to the appointment of censors of morals and missionaries and the creation of hospitals, roads, and wells, and conclude with prayers for the spread of Buddhism. The full number of principal edicts is fourteen, but there are also minor edicts on rocks and pillars. The edicts are of great interest as mentioning the Chola, Pandya, and Kerala Kingdoms of the South, and the Yavan (Greek) kings, Turmayaparni (Ptolemy), Antiyochema (Antiochus), Maka (Magus), and Alikasandare. Those

specially interested in the subject should consult *Asoka* by V. A. Smith (Clar. Press, 3rd Ed., 1920). The Buddhist legend is that Asoka covered India with 84,000 stupas and viharas. His administration was organised to enforce justice, religion, and virtue ; and he despatched several Buddhist missions to spread the doctrine far and wide. Mahendra (Mahinda), his brother, or son according to Ceylon tradition, headed the mission to that island, which was attended with complete success, and died there in 204 B.C. (p. 735).

After Asoka's time Buddhism more and more affected the literature and art of India. Towards the beginning of the Christian era exterior influences began to operate upon the religion, then widespread and popular in India, from the N.W. and E. Buddhist art made wonderful strides by the introduction of the Hellenic element. The Indo-Scythian monarch Kanishka (whose date is variously given from 58 B.C. to 278 A.D., and probably was 123 to 150 A.D.), a convert to Buddhism, became also a famous royal patron of the religion, raised mighty stupas, and encouraged the collecting of the Scriptures into a Canon. About this time, in the latter half of the 2nd century A.D., a marked development of the doctrine took place in N. India. The literature (Sanskrit works, shortly after translated into Chinese), sculpture, and painting show the predominance of a later conception of the Buddha and the essentials of Buddhist doctrine. This later phase of doctrine is called the Mahayana (the greater vehicle), the more advanced sect which outgrew, and was distinct from, the mother Church ; the Hinayana (lesser vehicle) more primitive doctrine of the South Asian countries, which have preserved the old Pali Canon, and, in general, corresponding motives in art. Under this newer Buddhism, the Mahayana, which had much in common with the older Hinduism, "the sage Gautama became in practice, if not in theory, a god, with his ears open to the prayers of the faithful, and served by a hierarchy of Bodhisattwas and other beings acting as mediators between him and sinful men." The Mahayana sect introduced many Bodhisattwas into their pantheon, with attendant deities and demons, spacious temples and images, processions, ceremonial, and festivals. The remains of Buddhist art are mainly the work of the Mahayana sect.

The missions to China led to visits of Chinese Buddhists, who made long and perilous pilgrimages to worship at sacred spots and collect copies of the sacred texts. Their accounts of their travels, fortunately preserved, are of the greatest value for our knowledge of the state of Buddhism in the 4th to 7th centuries A.D. Buddhism was the predominant religion from the 3rd century B.C. to the 4th century A.D., very influential, propagated systematically by a hierarchy, and wealthy, with its numerous monastic foundations,

centres of learning and art. It flourished during those centuries, and the religious orders were strong. But it had already powerful rivals in Jainism, and the Brahmanism (which was never ousted from India) adapted to popular worship and belief; the latter is to be distinguished from the Brahmanism of the Buddha's time, the strength of which seems to have been in sacrificial observances and Vedic study. Gradually the Brahmanic element in India overwhelmed the Buddhist as a popular religion, after the latter's prevalence for approximately one thousand years, so that Buddhism became by degrees assimilated to Hinduism. Some famous Buddhist monuments were converted in course of time into Hindu shrines. When Buddhism disappeared from the open country of the peninsula, it maintained itself in the Himalayas, Burma, and Ceylon. The Buddhist sculptures remain, ranging from Buddh Gaya and Bharhut, of the date of the Mauryan dynasty, 320 to 180 B.C.; Sanchi, before and after our era for several centuries; Amaravati and Gandhara, from our era to the 3rd century; to Ajanta and the later caves.

At the present time the most impressive traces of the ancient Buddhism of India may be roughly classified as (1) the sites of the places mentioned as his residences, or scenes of great events in Buddha's life—*e.g.*, Buddh (Bodh) Gaya and Sarnath; (2) Asoka's pillars, marking the stages of his religious pilgrimages, 3rd century B.C., and his rock edicts; (3) the stupas, afterwards modified; the earliest and very interesting bas-reliefs illustrating Buddhist sacred texts—*e.g.*, Sanchi, near Bhopal, and the remains of the Bharhut stupa; (4) certain sites in the N.W., where great monuments existed in the early centuries of the Christian era—*e.g.*, the great stupa of Kanishka, near Peshawar, discovered in 1909, containing a relic-chamber, with a valuable casket and its contents; the remains at Taxila; and the stupa of Piprawa, on the Nepal frontier; (5) the Græco-Buddhist sculptures, collected in museums from Gandhara, showing remarkable devotional art, in which Buddha, his life, and legends, are illustrated in markedly Hellenic style; (6) the later monuments, as at Amaravati, on the Kistna, in which Hellenic influence is marked.

Buddha is generally represented in one of three attitudes—he sits cross-legged, either with both hands raised in the preaching posture, or with his hands in contact in an attitude of profound meditation, or with one hand pointing to the earth (see Plate 2 on p. lix).

BUDDHIST FESTIVALS

The New Year Festival corresponds to the Makar-Sankranti of the Hindus (see p. lxiv), but in Burma it often takes place as late as

April. At a given moment, which is ascertained by the astrologers of Mandalay, a cannon is fired off, announcing the descent of the King of the Naths (genii) upon earth. Then begin the Saturnalia.

The last birth of Gautama is celebrated at the end of April by the worship of his images, followed by processions. In Ceylon the legendary coming of the Buddha to the island is celebrated by a festival in March or April, when the pilgrims visit either his footprint on Adam's Peak or the sacred Bo-tree at Anuradhapura.

THE JAINS

The founder of this sect, which in 1921 numbered 1,178,596 persons in India was Vardhamāna, commonly known by his title of Mahavira, and designated Nataputta by the rival order of Buddhists. The name of Nirgrantha ("without any ties"), of Parsvanatha's order, attached itself to Mahavira's order, but fell into disuse. Mahavira was born probably about 599 B.C. to Raja Siddhartha, head of the Nata clan of Kshatriyas, settled at Vaisali (the modern Basarh), about 27 m. N. of Patna. His mother was Trisala, a King's daughter. At thirty he adopted a spiritual career and became a monk of the Parsvanatha order. After twelve years his divine mission was recognised; he was entitled Mahavira (Great Hero) and acknowledged to be a Jina (spiritual conqueror), from which the system Jainism and sect Jain are derived. In the Jain hierarchy Parsvanatha was Mahavira's immediate predecessor; from him the sacred hill Parasnath, in the Hazaribagh district, has its name. Mahavira taught his religious system and organised asceticism for thirty years, chiefly in Bihar, in the same area as Gautama Buddha, without conflicting. He died probably in 527 B.C. at Pawa, in the Patna district. (These are the traditional dates: the *Cambridge History of India*, vol. I, p. 697, gives 540-468 B.C.).

Jainism is a monastic organisation—not strictly a religion. The Jains acknowledged caste, and the Brahmans as priests; their monastic order included four classes—monks, nuns (Svetambaras only), lay-brothers, and lay-sisters. Through this lay element Jainism survived in its monastic settlements and lay communities when Buddhism disappeared. The Svetambaras collected and preserved their sacred books in a Council at Pataliputra, the modern Patna, about 310 B.C.; a subsequent Council at Valabhi, in Gujarat, made a revised edition. In 79 or 82 A.D. a schism took place between the Svetambaras (white-clad) and Digambaras (sky-clad, or naked).

The chronicling spirit is strong in the Jains, who maintain lists of the succession of teachers. Ancient Jain stupas and inscriptions have been discovered. The object of the Jains is to obtain liberation

from the bonds of transmigration. As the cycle of re-births runs on unceasingly, the only remedy lies in breaking with life by an abnegation of the world. Thus is their attainment of Nirvana (liberation from any further re-birth) to be obtained in life, not after death, by the principles of Right Faith, Right Cognition, Right Conduct. Right Faith is absolute reliance on their founder as *the* Tirthankara, or pathmaker, to Nirvana. There were twenty-four Tirthankaras, from the first, Adinath, to the last three, Neminath, Parsvanatha and Mahavira. Each is known by a symbol (see p. 189). They are to be found principally in Ahmadabad and elsewhere in the Bombay Presidency. For their temples consult p. xcvi. Right Cognition means the correct understanding of the Jain theory of the world, which assigns a soul to every individual person or thing. Right Conduct is summed up in five great vows, which include their regard for the minutest creatures of animal life as possessing souls. Only monks can attain Nirvana ; nuns cannot reach it, nor can the lay adherents, for whom the vows are relaxed. Jainism has developed by the introduction of a religious cult into their essentially atheistic system. The building of temples and other religious features are excrescences on the pure Jain system, due to the admission of the lay element. The Jains chiefly reside in the trade centres of W. India. Their most famous shrines are at the hill of Parasnath (p. 59) Satrunjaya, near Palitana, in Kathiawar (p. 236), and Mount Abu (p. 211). They differ from Hindus on certain points, while agreeing generally. They maintain pinjrapols, or hospitals, for all decrepit animals. They are great traders and very charitable.

CHRISTIANITY IN INDIA, BURMA AND CEYLON

The spread of Christianity in India,¹ Burma and Ceylon is a matter of deep interest, upon which full details will be found in the annual reports of the various Missionary Societies at work in these countries. The census returns show a remarkable increase of Indian Christians during the last forty years. In 1881 the total enumerated as Christians was 1,862,000 ; 2,923,241 in 1901 ; 3,876,203 in 1911 ; and in 1921 4,753,174, representing practically 1½ per cent. of the total population of India and Burma. Of the last total 4,464,396

¹ St Francisco de Xavier (1506-52) began missionary work in India in 1542 at Goa, and among the Paravas, the pearl-fishermen. His course lay through Travancore, Ceylon, Mailapur, Malacca, the Malay Archipelago, India and Malacca again, Japan, Goa, Singapore ; he died on the Chinese coast of Kwangtung, and was eventually buried at Goa. The first Protestant missionaries were the Lutherans at Tranquebar in 1706, the Baptists at Serampore in 1793, and the Anglican Church in 1813. (Chap. IX. of Sir W. W. Hunter's *Indian Empire*, W. H. Allen & Co., 1893, gives a good account of the spread of Christianity in India.)

were Indians, 113,041 were Anglo-Indians, and 175,737 were Europeans and allied races. The Anglo-Indians are mainly in Madras, Bengal and Burma: the European and allied races mainly in Bombay, Bengal, United Provinces and Madras. The Madras Presidency and its States account for more than half of the 4·7 millions, and as many as 1·4 millions are in the two Indian States of Cochin and Travancore. Then follow the Panjab with 329,000; Bombay Presidency with 265,000; Burma and the Province of Bihar and Orissa with 257,000 each; and the United Provinces with 200,000.

In 1921 the Anglicans numbered 533,180. Of these 184,072 were in the Madras Presidency; 67,791 in Travancore State, and 62,963 in the Panjab. The Baptists numbered 444,479; chiefly in the Madras Presidency (170,948) and in Burma (160,656). The Congregationalists numbered 123,016, of whom 108,062 were in Travancore State. The Lutherans numbered 240,316, principally in the Madras Presidency; the Methodists 208,135, mainly in the United Provinces; the Presbyterians 254,838, mainly in the Panjab. The Roman Catholics numbered 1,823,079; to which total the Madras Presidency contributed 747,391, Travancore State 327,979, the Bombay Presidency 156,394, the Province of Bihar and Orissa 126,520, and Cochin State 108,739. The Salvation Army numbered 88,922 adherents, mainly in the Panjab and Travancore State. The Jacobite-Syrians were in number 252,989, almost entirely in Travancore State; and the Romo-Syrians 423,968, chiefly in the Cochin and Travancore States.

No doubt most of the Indian Christians during the last sixty years have come from the depressed classes of Indian society and from the aboriginal races. The movement towards Christianity among these classes has been mainly due to social causes; and two results have been the education of their children and their uplift from degradation. The main centres of this work have been (1) in *Northern India*—the Chenab Colony in the Panjab, the Central Provinces, Chota Nagpur, and the Khasi Hills in Assam; and (2) in *Southern India*—the Telugu Country in the north of the Madras Presidency, the Tinnevely district in the south, and the States of Travancore and Cochin. Moreover, a body of Indian public opinion has been created in favour of treating the depressed classes as fellow human beings.

In the case of the higher grades of Indian society, the number of Indian Christians is comparatively small; but these have exercised a much greater influence over the educated classes of the community than their number would suggest. At the same time the study of Christian teaching has had a reflex action on the higher classes. Whatever may be individual opinions regarding the work and

results of proselytising in India, the value of the work done in the Mission colleges and schools is immense and is becoming far-reaching in its effects. The spread of the ethical and philanthropic ideals of Christianity also operates largely through medical missions. Mission hospitals and dispensaries have had an important influence on many classes. Mission schools have also done pioneer work in the matter of female education; indeed the humanitarian work of women, whether within or without the mission field, has been considerable both in this and other directions.

In Ceylon the number enumerated as Christians was 443,400 in 1921 out of a population of 4,498,605, practically 10 per cent., against 409,100 out of 4,110,000 in 1911. Of this Christian population 368,499 were Roman Catholics, 44,730 Church of England, 17,345 Wesleyans, 3536 Presbyterians, 3511 Baptists, besides members of the Salvation Army, Congregationalists, and others.

ARCHITECTURE

THE recent excavations carried out by the Archæological Survey of India at certain sites in the Punjab and Sind, notably Harappa (p. 400), and Mohenjo-daro (p. 413), have revealed the existence in India of an important cultural development which extended over a considerable portion of Europe and Asia in the 3rd and 4th millennia B.C. These evidences of the Chalcolithic age, owing to their geographical position, have been termed the "Indus" civilisation. In the alluvium left by this great river and its tributaries, several well-planned cities have been unearthed, and from the foundations of these it is possible to see that they contained buildings of spacious proportions constructed of excellent materials put together on the most approved lines. Only the bases of these structures have survived, so that their architectural character is unknown, but of their high technical quality there is ample evidence. The finely burnt bricks bonded in gypsum mortar, the arching of doorways and culverts by oversailing courses of masonry, the presence of stairways, the waterproofing of tanks with bitumen, and numerous other constructional systems and devices indicate that at this early age the art of durable building in India was thoroughly understood. Of far-reaching archæological importance as this discovery of the Indus civilisation is proving to be, at present it stands out more as an isolated phenomenon than part of a definite continuous development, as it is separated from the first historic period of the country by a hiatus of more than two thousand years. When more light is thrown on this long interval, it may be possible to trace the evolution of the building art in India from its most remote beginnings.

Style and decoration in architecture are largely conditioned by the character of the materials employed. In primitive India, as among the poorer classes of to-day, the materials most commonly in use were mud or mud bricks, bamboo canes, and other kinds of wood. The simplest kinds of dwellings were constructed of screens of bamboos inwoven with palm branches or the like, the roofs being either flat or arched. In the latter case the bamboos were lashed together at the apex and tied in near the lower end, thus forming a singularly strong framework of curvilinear form, while the walls were strengthened to resist the outward thrust. In other cases the walls were constructed of unbaked brick or mud, and the latter material was also used as a covering for the flat roofs or for plastering the screens of the walls on the "wattle and daub" principle. Later on cut timbers came to be used in the more pretentious dwellings, and afforded opportunities for the development of that exuberant surface decoration in which the genius of India has always excelled. No kiln-burnt bricks (except those mentioned above belonging to the Chalcolithic age) have yet been found of a date earlier than the 5th century B.C., though it is likely enough that their manufacture was understood long before then, particularly in the N.W. of India. On the other hand, the potter's art was practised in India from time immemorial, and concrete made of broken potsherds and *kankar* lime was employed for floors at least as early as the 8th century B.C., while roof tiles of terra-cotta were fashioned quite a century before the art of stone-cutting was practised. Lime mortar was used in pre-Muhammadan monuments in Kashmir two or three centuries B.C.

These materials left their character deeply and permanently impressed on Indian architecture. From the use of the bamboo came the curvilinear type of roof, which was afterwards reproduced in cut timber and subsequently in stone, and from which was evolved the familiar *chaitya* arch used over doorways and windows. Log pillars were imitated in stone, the more finished timbering of walls and roofs and gateways in the same materials, every detail, down to the nail heads, being copied with sedulous care and accuracy by the masons of later days. As a protection against white ants wooden posts were set, as they still sometimes are, in *gharas*, or jars of earthenware, and from these resulted the "pot and foliage" base, so beautifully developed in the Gupta age. Ignorance of the use of mortar made the construction of true arches and domes impracticable in the pre-Muhammadan period, but arch and dome forms were not unknown, and were imitated both in brick and stone, usually by corbelling the masonry. A striking illustration of the influence exerted by brick as contrasted with wood construction is to be found in the pillars of the cave temples. In the earliest examples the stone pillars

are manifestly copied from wooden and are relatively slender, though amply thick enough for their purpose. In the later examples, on the other hand, the pillars are heavy and cumbersome—not because extra strength was required, nor yet, probably, in order to save labour, but because they were copied from the brick-in-mud pillars of famous structural *viharas*, which necessarily required to be much thicker in proportion to their height than columns of stone.

This close adherence to tradition constitutes the gravest fault of Indian architecture; for it has led to the perpetuation of primitive forms long after they have lost their *raison d'être*, and has deterred the builders from adapting their ideas to new conditions. Conservatism in art is of value in so far as it results in preserving what is appropriate and beautiful; it becomes a defect when it leads to the atrophy of effort and inventiveness.

Apart from the prehistoric cities of the "Indus" civilization, together with certain walls built of ponderous Cyclopean masonry and a few dwellings of the same character at Rajagriha, the earliest structures so far known to exist in India are the houses recently excavated at Bhita (p. 52), which date back to the 4th century B.C. They were constructed of burnt brick laid in mud, with brick and plaster floors, timbered ceilings, and pitched—probably curvilinear—roofs, protected by tiles and adorned with finials of terra-cotta,¹ their plan being similar to that of the Buddhist monasteries, of which they are manifestly the prototype. Dressed stone work does not appear to have been introduced into India until the time of Asoka (250 B.C.); but the few examples which we possess belonging to that period, namely, the famous pillars or *lats* of Asoka, the caves in the Barabar Hills, and a monolithic rail at Sarnath, display in the precision with which they were cut and in their exquisite finish a mastery over material such as was never afterwards equalled by Indian masons, and which even the marble work of the Parthenon does not surpass. This complete mastery over material, coupled with the Perso-Hellenic character of the sculptures which adorn the *lats*, would indicate that the monuments in question were the handiwork of Asiatic Greeks, or of Indian craftsmen working under their immediate direction.

From this time onwards stone came more and more into prominence, and in the Sunga period (180-70 B.C.) was being freely used by the Buddhists for their sacred monuments. To this epoch belong the famous railings of Bharhut, Buddh Gaya, and Sanchi—all of them manifestly in imitation of wooden models, and adorned with sculptures which, in spite of the introduction of many Western-

¹ For an illustration of a tiled roof of this kind, see Cunningham, *Stupa of Bharhut*, Pl. xxvi., 7.

Asiatic motifs, exhibit a truly indigenous character. Of these three railings, that at Bharhut is the most primitive, that at Sanchi the most developed; and it is interesting to observe how rapidly the art of sculpture improved in the relatively short space of time which intervened between them. The reliefs of both series are simple and naturalistic in style, appealing directly to the feelings by their human sympathy. In the former, however, the carving is wooden to a degree, the figures "frontal" and archaic, and the scenes lacking in composition. In the latter the modelling of the figures becomes free and plastic, there is vitality in their movements, more feeling for decorative effect in composing them, and in general more æsthetic beauty. This rapid artistic development is also remarkably well illustrated in the Mathura School, where a comparison of the sculptures of this epoch, few though they are, is the more significant in that they were produced in one and the same place.

Contemporary with these Buddhist *lats* and railings are the earlier rock-cut temples of Western and Eastern India, which, however, do not belong exclusively to the Buddhists. These rock-cut temples include two main features, the so-called *chaityas*, or chapels, and the *viharas*, or monasteries, in addition to which *stupas*, or *dagobas*,¹ as they are sometimes termed, are often formed out of solid rock. In addition to the chapels of Mauryan date in Bihar alluded to above, notable examples of *chaityas* are to be found at Karli, Bhaja, Bedsa, Nasik, Ellora, Ajanta, and Kanheri. In plan, as in purpose, they are remarkably similar to the early Christian *basilicas*, being divided by two rows of columns into a nave and two narrow side-aisles, which are continued around the apse at the farther end. The *viharas* usually consist of a rectangular hall with cells around and, in the later examples, a shrine in the back wall, the roof being frequently supported by columns, often richly carved. In determining the relative age of both *chaitya* halls and *viharas*, it may be taken as a general rule that the nearer they approximate to wooden construction the older they are. Thus in the *chaitya* halls at Bhaja and Kondana, which are two of the oldest, the façade screens in front of the chapels are actually made of timber, the excavators not having yet attempted to reproduce them in stone; while at Bhaja also, as well as at Karli, Bedsa, and Kanheri, wooden ribs are employed beneath the soffit of the vaulting, as if the solid rock above required support! But this index of age must not be pressed too far; for it is not to be presumed that an equal rate of progress was simultaneously maintained by all the builders; and other structural and decorative features, therefore, must be taken into account—such as the leaning of the pillars;

¹ = the "pagoda" of Burma and the "dagoba" (*dhatu-garbha*, receptacle for a relic) of Ceylon.

which at first slope inwards but afterwards become vertical, and the plastic character of the sculpture, the evolution of which is pursued along clear and definite lines.

The form of the original structural *chaityas* and *viharas* could, until recently, only be surmised from the cave temples and monolithic *rathas*, but the Archæological Department have lately discovered a complete *chaitya* hall of brick at Ter, in the Deccan, and another of stone has still more recently been found in the Almora district of the United Provinces. The excavations, too, of the Archæological Department at Sarnath, Kasia, and other places, now leave little room for doubt as to the design of the ancient *viharas*, while at the same time they discount the theory propounded by Fergusson that the structural *vihara* took a pyramidal form like the square *rathas* at Mamallapuram.

The foreign influences discernible in Indian architecture in the Mauryan and Sunga periods, and which must have been strong in the N. of the peninsula during the rule of the Greek Kings of the Panjab, received a fresh and powerful stimulus during the first centuries before and after Christ, when a Hellenistic school of art was established in the N.W. frontier. This school, known as the "Gandharan" from the ancient Province of Gandhara, was devoted exclusively, so far as is known, to the service of Buddhism. Its architecture is chiefly characterised by a diaper-patterned masonry, in which massive blocks of stone are employed, with layers of small stones or bricks to fill the interstices between them; by the use of rounded or pointed arches constructed on the corbel system; by the free use of classical forms and motifs, such as the Corinthian capital and the undulating garland; and by the great wealth of decorative bas-reliefs illustrating the life and previous births of the Buddha. It is in the Gandhara School that the earliest representations of Buddha were evolved, and it was, no doubt, largely due to the immediate popularity which iconism won among the Buddhists that the influence of Hellenistic art spread so widely and rapidly in India. Even before the time of the Kushan Emperor Kanishka we find the wave of this influence spreading over Hindustan and permeating the indigenous school of Muttra (Mathura), while a little later it makes itself felt at Amaravati, in the Deccan, though its force was largely spent when it reached that distant place.

With the rise of the Gupta Empire in the 4th century A.D., Indian architecture and Indian art entered on a new phase. Under the foreign domination of the Scythian rulers, and during the troublous times which ensued on their downfall, indigenous talent had been largely stifled and suppressed; but with the achievement of political independence there followed a remarkable intellectual

revival, which affected architecture and the plastic and pictorial arts no less than literature, and which is comparable in many respects to the Renaissance that Europe experienced in the 15th century. The spirit of the age, it need hardly be said, was not the same as it had been four centuries before, and the changes which had come over the social life and religious ideas of the people in the meantime are clearly reflected in their architecture. The naïve simplicity of earlier days now gives way to more conventional expression; the natural yields to the ideal, the humane to the spiritual; but the artistic feeling of the people has lost none of its force, and a new charm is imparted to it by the very restraint which the intellectuality of the age has imposed. The Gupta epoch, indeed, which extends from the 4th to the 7th century A.D., is mainly remarkable for its intellectual treatment of architectural forms, for the appreciation shown of plain surfaces and of the contrast of light and shade, and most of all, perhaps, for the vitality and freshness of its plastic and pictorial decorations, which, in spite of their richness, are used with almost classical refinement and restraint.

The best preserved monuments of the Gupta epoch are to be found among the cave temples of Western and Central India (*e.g.*, Nos. 16, 17, and 19, at Ajanta, several of the later Buddhist caves at Ellora, and those at Udayagiri, near Besnagar), in the carved brick temples of Bhitargaon and other places in the Cawnpore district, decorated with spirited terra-cotta reliefs, in the flat-roofed temples at Tigawa and Deogarh, and in the Dhamek *stupa* at Sarnath, where recent excavations have thrown a flood of light on the art of this period. The type of flat-roofed temple has usually been regarded as the peculiar product of the Gupta builders, but the flat roof is too common a feature in the East to be ascribed to the invention of any particular epoch, and it is rather in the treatment of mouldings and door frames and in other decorative details that the Gupta character of these structures manifests itself. As a fact, almost every form of roof construction, from the ancient *chaitya* ridge roof to the Northern steeple, must have been employed in the Gupta times. The powerful and vitalising effect of Gupta art spread far and wide over the whole Indian peninsula, and to countries far beyond, long surviving the dynasty from which it takes its name. Indeed, it is safe to say that no phase of art has ever made such a deep and enduring impression upon the countries of the middle and farther East. In the Himalayan tracts it is found vigorously flourishing in Chamba, Kulu, Mandi, and other regions towards the West, where numerous temples of stone, or of stone and timber combined, exhibit in their decorative carvings and other details the closest analogy with Gupta monuments of the plains. In Kashmir and the Salt range it combined

with classical elements, derived probably from the older Hellenistic art of Gandhara, to produce a local style, of which the most characteristic features are high pitched roofs, gables, trefoil arches, and quasi-Doric columns. The most notable example of this style is the well-known Temple of the Sun at Martand, near Islamabad, in Kashmir, which was erected about the middle of the 8th century by King Lalitaditya. The more ornate temple at Avantipur is about a century, and the miniature shrine at Payer about two centuries, later.

From the many and various styles of architecture which were taking shape during the Gupta epoch there emerged in the mediæval ages, besides a number of subsidiary varieties, three leading types, each of which produced monuments of imposing grandeur and magnificence, though their ornateness contrasts unfavourably as a rule with the greater refinement of earlier decoration. Of these three styles the so-called Indo-Aryan prevailed over Hindustan, being rarely found South of the Tapti and Mahanadi rivers. Its most salient feature is the curvilinear steeple divided into vertical bands, which rose above the square sanctuary, and was frequently repeated on a smaller scale in other parts of the building, or in miniature by way of decorative device. The purest and, withal, the most imposing examples of this style are to be found among the temples at Bhubaneswar, in Orissa, which, numbering, as they do, several hundreds, and ranging in date from the 9th or 10th to the 13th century, afford a remarkably instructive illustration of the progress of the style. Another very important group at Khajraho, in Bundelkhand, includes buildings dating mainly from the 10th and 11th centuries, and belonging to Jains as well as to Hindus. Though built on a less pretentious scale than those of Orissa, they undoubtedly surpass them in perfection of symmetry and elegance of details.

A singularly lovely variety of this Indo-Aryan architecture is commonly known as the Jain style, though as a fact it was used indiscriminately by the Hindus and Jains alike throughout Western India. It is distinguished by the free use of columns to obtain a more spacious area in the interior of the *mandapams*, by the employment of strut brackets as an additional support to the lintels, and by the exquisitely fine carving of ceilings and columns, which are elaborated with a delicacy that has never, perhaps, been surpassed. The most perfect and highly ornate models of this style are the two Jain temples on Mount Abu—the one built by Vimala Sah in 1031 A.D., the other, two centuries later, by Tejpal. Other admirable models are at Nagda, near Udaipur, where the style is employed by Hindus and Jains alike, and at Girnar and Satrunjaya, in Gujarat.

In sharp, clear contrast with the architecture of the North stands the Southern or "Dravidian" style, as it has been suitably termed

from its prevalence among the peoples who speak the Dravidian tongues. As it is a distinguishing characteristic of Indo-Aryan architecture that its most prominent lines tend to the perpendicular, so it is a characteristic of Dravidian that they tend to the horizontal; and while in the former style the most conspicuous feature is the curvilinear steeple (*sikhara*), in the latter it is the pyramidal tower (*vimana*), rising storey upon storey in horizontal bands, each bounded by straight lines and crowned by a *chaitya* or domical roof. In the later examples of this class the main shrine is enclosed by a quadrangle (*prakara*), or by several such quadrangles, set one within the other, which are entered through lofty gateways or *gopurams*, and which often enclose great corridors and pillared halls (*mandapam*), as well as minor shrines.

The rise of this style is first traceable among the rock-cut temples known as *rathas* at Mamallapuram, on the sea-shore south of Madras, which are to be ascribed to about the 7th century A.D. These monolithic *rathas* are either square or oblong in plan, the square ones being the prototype of the *vimanas*, or temples proper of Southern India, while the oblong, which are manifestly modelled on the design of the Buddhist *chaitya* halls, subsequently develop into the great *gopurams* of later times. The next valuable landmarks in the history of this style are furnished by the Kailasanatha and Vaikuntha Perumal temples at Conjeeveram, belonging to the first half of the 8th century, and by the Virupaksha temple at Pattadakal, built in the reign of Vikramaditya II. (733-747 A.D.), while a little later comes the rock-cut temple of Kailasa, at Ellora, far to the North of the Tamil country.

A further stage in the development of Dravidian architecture was reached under the Chola Kings, Raja Raja and his son Rajendra (A.D. 985-1035), the first of whom is responsible for the Great Temple at Tanjore, the second for a similar temple on a smaller scale at Gangaikondapuram, in the Trichinopoly district. These and the vast edifices of later date, with their spacious quadrangles and mighty *gopurams*, form, to quote Fergusson, "as extensive and in some respects as remarkable a group of buildings as is to be found in Provinces of similar extent in any part of the world—Egypt, perhaps, alone excepted; but they equal even the Egyptian in extent." They consist, as a rule, of a square base, ornamented with tall, thin pilasters, and containing the shrine (*garbha graham*) in front of which is frequently a hall (*mandapam*), or even two, though this feature is not essential. Over the shrine is the pyramidal *vimana*, or tower, referred to above, always storeyed, and crowned with a circular or polygonal dome. The *gopurams* are placed at the entrances to the surrounding courts, and face the cardinal points, their general design being that of the shrine, though their width is about dou...

their depth, and their proportions frequently far more imposing than the latter. In the case of the Great Temple at Tanjore (10th century) the *vimana* over the shrine, rising in eleven storeys to a height of 190 ft., entirely dominates the gateways, but in temples of later date, as the Srirangam Temple, near Trichinopoly (17th century), the converse is the case, the relatively insignificant shrine being overmastered by the *gopurams* of the courts, each of which as one passes outwards is more lofty and decorative than the last. Remarkable as it may seem, this arrangement, which is characteristic of very many later Dravidian temples, is the natural outcome of a perfectly logical development; for the shrine, being the most essential structure, was the first to be erected, and as its fame and wealth increased court after court was added round it, each more imposing and magnificent than the last, the successive stages of building being traceable in the plans and details of the structures.

Intermediate between these two main styles—the Indo-Aryan of the North and the Dravidian of the South—comes the architecture of the Deccan, which prevailed mainly over the basin of the Godavari, though examples of it are found outside this area and even as distantly remote as the Himalayas. This is the style to which the term Chalukyan was given by Fergusson, though as a fact its most typical and perfect models were erected under the Hoysala and not under the Chalukya rulers of the Deccan. It was evolved partly from the Southern, partly from the Northern style, and in its infancy exhibits a close approximation to the one or the other of these, though, speaking generally, it is nearer akin to the Dravidian¹ than to the Indo-Aryan, preserving, in particular, the general plan adopted in the shrines of the former type. Later on it gradually acquired distinctive traits of its own. The plan becomes polygonal and star-shaped instead of quadrangular; a high and richly-carved base following the same outline, is added to the temple; and the high storeyed *sikhara* of the roof is converted into a low pyramid, in which the horizontal treatment of the South is combined with the perpendicular treatment of the North. On the early evolution of this architecture useful light is thrown by the temples at Aiholi and Pattadakal in the South of the Bombay Presidency, where the cradle of this style is perhaps to be located; and in the same Presidency some fine examples of the more mature Deccan type exist at Dambal, Rattihalli, Tiliwalli, and Hangal. In Hyderabad, too, there are some magnificent monuments of this class at Ittagi, Nilanga, Buchanapalli, Warangal, and many other places. But it is in Mysore, among the temples at Halebid, Belur, Somnathpur, Nuggehalli, and else-

¹ Mr Cousens in his *Chalukyan Architecture* (1926, p. 17) describes the type as an "outgrowth of the early Dravidian style."

where, that the style is found in its full perfection. The treatment of details in these monuments is extremely rich and varied, and the fancy displayed in the sculptured decoration wildly exuberant. Yet wonderful as this decoration is, and eloquent of the infinite pains and labour expended on its production, the paramount beauty of these temples is due almost more to their grace and symmetry and to the singularly happy proportions maintained between their various component parts; while the ever changing play of light and shade on the broken surfaces of their walls and roofs adds a charm suggestive of the masterpieces of Gothic art.

Religion has so great an influence upon Architecture that the different styles in India may be most conveniently classified as Buddhist, Jain, Brahman, and Muhammadan.

Buddhist.—Though Gautama taught in the 6th century B.C., his religion made little progress before its adoption by the great Asoka, who reigned from 274 to 237 B.C. The palaces, halls, and temples which may have existed before the time of Asoka were made of wood, and have perished. There was probably no stone architecture in India before that date, and all the monuments known to us for five or six centuries after it are Buddhist.

Every sanctified Buddhist locality was marked by the erection of a tope (stupa) commemorating some holy event or containing relics, in which case the tope was called a dagoba. The relics of a dagoba were usually contained in a sort of box or case at the summit of it called a tee (or *hti*). Older even than the tope was the memorial pillar, called *stambha*, or *lat*, if it was carved out of one stone; these pillars bore Buddhist emblems—such as lions or wheels—and were afterwards converted in various parts of India into pedestals for lamps or vehicles of the gods, and the like. Rails are found surrounding topes, or enclosing sacred trees, pillars, etc. The chaityas, assembly halls or temples, correspond to the churches of the Christian religion; the viharas are monasteries (see plans at pp. 79 and 523).

The best known topes are those at Sanchi (p. 167) and Sarnath (p. 100). There are also a number of them scattered over the ancient province of Gandhara, the capital of which was Peshawar—especially at Manikyala (p. 375). In Ceylon there are topes or dagobas at Anuradhapura and Polonnaruwa (pp. 766 and 773). The lats, or pillars, stood in front of, or beside, each gateway of every tope, and in front of each chaitya (pp. 523-4). Many of these were erected by Asoka, and two of these are still in existence at Delhi, and a more complete specimen at Allahabad. (The Iron Pillar in the mosque at Old Delhi is not Buddhist, but seems to be dedicated to Vishnu.) The most interesting rails are at Sanchi and Buddh (Bodh) Gaya; the remains of the Bharhut rail are at Calcutta, and of the Amaravati

(p. 519) rail in the British and Madras Museums. There are fine examples of torans, or gateways, with the rail at Sanchi.

Our knowledge of the chaitya chapels, or temples, and the viharas, or monasteries, is derived mainly from the rock-cut examples (but see p. 165). This method of working is easier and less expensive than the process of building. For a cave nothing but excavation is required; while for a building the stone has to be quarried, transported,—perhaps a long distance,—and then carved and erected. According to Fergusson,¹ the complete excavation of a temple, both externally as well as internally, would cost only about one-tenth of the expenditure necessary for building; and the Buddhist caves were still cheaper, as (except in the case of the Kailasa temple) the rock was not cut away all round, the interior chamber alone being excavated. Examples of chaityas are to be found at Karli, Bhaja, and Bedsa (pp. 523-26), near Gaya (p. 56), at Nasik, Ellora, Ajanta, and Kanheri (p. 32). They usually consist of a long excavation, separated by two rows of columns into a nave, and two narrow side aisles. At the farther end of the cave is either a small tope or a figure of Buddha, behind which also the colonnade runs; and in the front wall over the entrance-door is a large horse-shoe window, which allows the light to fall directly on the tope, or image. A vihara is usually a large rectangular hall, with cells opening off it round the sides, and a shrine chapel in the back wall. The hall is commonly borne by columns, often richly carved, and is approached by a veranda; and in some cases it had a forecourt in front of this. In a few instances these halls consisted of two, and even three, storeys. The most notable specimens are at Bhaja and Bedsa, Ajanta (p. 68), Nasik, Kanheri and Ellora, and at Jamalgarhi and Takht-i-bahai, near Peshawar.

Among the most characteristic details of Buddhist sculpture are the patterns representing rails and horse-shoe windows, the figures of Nága devotees over-canopied by cobra hoods, and probably intended to represent aboriginal residents of India, and scenes of worship (by animals as well as by human beings), of topes, sacred trees, and emblems of the Buddhist religion—the wheel, trident, swástika cross, etc., which also recur in the decoration generally.

Jain.—The architecture of the Buddhists proper was succeeded by that of the *Jains*, who were great builders. Unlike the Buddhists, they were not great excavators, though some examples of their cave-work exist at Ellora. The characteristic Jain feature is the horizontal archway, which avoids the strain from the outward thrust of a true radiating arch. Indeed, with the exception of some specimens of the time of Akbar, no radiating arch exists in any Buddhist, Jain, or

¹ *History of Indian and Eastern Architecture*, I, 349.

Hindu temple in India up to the present day. Another Jain feature is the carved bracket form of capital, which, springing from the pillars at about two-thirds of their height, extends to the architraves, and forms a sort of diagonal strut to support them. The leading idea of the plan of a Jain temple was a number of columns arranged in squares (see p. 243). Their domes, like their arches, were built horizontally, on eight pillars forming an octagon, with four external pillars at the angles to form a square. The lateral pressure of a dome built on the radiating plan by the Roman, Byzantine, or Gothic architects prevents the use of elegant pillars, great cylinders with heavy abutments being necessary. The construction of the Jain domes, being horizontal, allows of more variety than can be given to the vertical ribs of Roman or Gothic models, and has rendered some of the Indian domes the most exquisite specimens of elaborate roofing that can anywhere be seen. On the other hand, they are necessarily small, and require large stones, while a dome on the radiating principle can be built of small bricks. The Indian dome allows the use of pendants from the centre, and these have the lightness and elegance of late Gothic art. The Jains often built their temples in groups, or cities of temples, as at Satrunjaya (p. 236), Parasnath (p. 59), Girnar (p. 243), Mount Abu (p. 211), and Khajuraho (p. 178). Their love of the picturesque led them to construct their cities sometimes on hill-tops, as at Mount Abu, and sometimes in deep and secluded valleys. The two towers of Fame and of Victory at Chitor (p. 157) are also examples of Jain work, and splendidly carved specimens of their characteristic pillars, dating from the 10th to 12th centuries, still exist in the great mosques at the Kutb Minar, S. of Delhi, and in Ajmer, Ahmadabad, and Belgaum (p. 574). Of modern Jain architecture the most notable specimens are at Sonagir (p. 180) and Muktagiri, the temple of Hathi Singh (A.D. 1848) at Ahmadabad, the temple at Delhi, about one hundred years old, and the temples at Calcutta (p. 127).

Brahman architecture is divided by Fergusson into the three styles of Dravidian, Chalukyan, and Indo-Aryan. The *Dravidian*, or Madras, architecture is best seen at Tanjore, Tiruvalur (p. 661), Srirangam, Chidambaram, Rameswaram, Madura, Tinnevely, Conjeeveram, Coimbatore, and Vijayanagar (p. 587). The oldest of the Dravidian temples date from about the 11th century; but in their present form few can go back as far as the 13th, and most are of even more modern date. Quite the oldest temples in India, dating from the 7th to 8th centuries, are those at Pattadakal and Aiholi, near Badami (p. 583). The shrine itself, which is called the *vimana*, is always square in plan, surmounted by a pyramidal roof of one or more storeys; a porch, or *mandapam*, covers the door leading to the

cell in which the image of the god is placed ; the gate pyramids, or *gopurams*, are the principal features in the quadrangular enclosures which, with numerous other buildings, surround the *vimanas*. The chief Dravidian rock-cut temples, which, unlike the Buddhist caves, are excavated externally as well as internally, are at Mamallapuram (p. 635) and Ellora. The Palaces exhibit Muhammadan influence, having the Moorish pointed arch. They are to be found at Madura, Tanjore, Vijayanagar, and Chandragiri (p. 542).

The *Chalukyan* style was at its best in the province of Mysore during the three centuries A.D. 1000 to 1300, when the Ballalas ruled there. They erected groups of temples at Somnathpur (p. 601), Belur, and Halebid (p. 596). Other Chalukyan examples are at Warangal and Hanamkonda (p. 569). This style is remarkable for elegance of outline and elaboration of detail. The animal friezes begin, as is usual in India, with elephants in the bottom line, then lions, then horses, and then oxen, above which are pigeons or other birds.

Examples of the *Indo-Aryan*, or Northern style, exist at Bhubaneswar (pp. 505, 508), the black pagoda at Kanarak, the temple of Jagannath at Puri, all dating from the 11th, 12th and 13th centuries, the Garuda pillar at Jajpur (p. 503), Khajraho, the Teli-kamandir at Gwalior, the temple of Vriji at Chitor, the golden temple of Biseswar at Benares, the red temple at Brindaban, and the modern temple erected by Sindhia's mother at Gwalior. There are rock-cut temples of this style near Badami and at Ellora.

The finest Indo-Aryan Palaces, besides the Man Singh Palace at Gwalior, are at Udaipur, Datia (p. 179), Orchha (p. 176), Amber (p. 228), and Dig (p. 262). The beauty of Hindu architecture is greatly enhanced by the use of picturesque sites, either on hills, in valleys, or where the æsthetic value of water may be utilised. At Rajasamund, in Udaipur, for example, the *bund* or dam of the artificial lake is covered with steps, which are broken by pavilions and kiosks, interspersed with fountains, the whole forming a fairy scene of architectural beauty. Of modern Indo-Aryan civil architecture the best specimens are the tombs of Sangram Singh and Amar Singh at Udaipur, and of Bakhtawar Singh at Alwar. The latter shows the foliated arch which is so common in Mughal buildings ; and it also shows the Bengali curved cornices, whose origin was the bending of bamboos used as a support for the thatch or tiles.

The history of *Indo-Muhammadan* art¹ is dated from about 1200 A.D., the time of the Ghor dynasty and the Slave Kings at Delhi. So many as twelve or fifteen styles of Muhammadan architecture have been distinguished in India, but in all there will be found domes

¹ *A History of Fine Art in India and Ceylon* (p. 391), by V. A. Smith (Clarendon Press, 1911).

and arches (usually pointed) derived from the Bagdad style, and that again from the ancient vaulted architecture of Mesopotamia. The chief styles, which may be classified broadly as the Pathan, so-called (between 1193 and 1556 A.D.) and the Mughal, prevailed principally in Northern India. The early Muhammadan conquerors found in the colonnaded courts of the Jain temples nearly all that was required for a mosque. They had only to remove the temple in its centre and erect a new wall on the West side, adorned with niches (*mihhrabs*), pointing toward Mecca, in front of which they added a screen of arches, with rich carvings. The earliest principal works are at Delhi—the Kutb Mosque and Minar, and the tomb of Iltutmish (Altamsh); at Ajmer—the mosque; and at Budaon—the gateway of the mosque. While the Muhammadan conquerors dictated the plan and main features of the earlier mosques, for want of craftsmen of their own faith, they employed Hindu masons and carvers in the construction and decoration. This accounts for the elaborate detail and many purely Hindu characteristics. Fergusson (*Ind. Arch.*, 2, 204) considered that the carving of the screen at the Kutb Mosque, Delhi, is, without exception, the most exquisite specimen of its class known to exist anywhere. He also considered (2, 206) that the Kutb Minar “both in design and finish far surpasses any building of its class in the whole world,” and that Giotto’s Campanile at Florence, “beautiful though it is, wants that poetry of design and exquisite finish of detail which marks every moulding of the Minar.” In the earliest examples of the Pathan period, the dome is not made a prominent feature.

But the outlying Provinces of the empire invented styles of their own expressive of their local peculiarities. These can be seen at Jaunpur (p. 432), the capital of the Sharki dynasty (1394-1476); in Gujarat, especially Ahmadabad (p. 201), while independent (1396-1572); at Mandu, in Malwa (1401-1531), (p. 149); at Gaur and Pandua, in Malda (1203-1573), (p. 480). S. of the Narbada the Bahmani rulers (1347-1525) constructed their buildings of various styles at Gulbarga (p. 538) and Bidar. Bijapur (p. 572) and Golconda (p. 567) also had their special fashions in building.

With the advent of the Mughals, the influence of Persian architecture begins to be felt. Of Babar’s (1526-30) works only two mosques remain—at Panipat and Sambhal (p. 424); and a mosque built by Humayun still exists at Agra. Persian influence first became markedly apparent in the tomb of Humayun at Delhi, built in Akbar’s reign. Akbar, indeed, in architecture, as in religion, was extremely tolerant and eclectic; and many of his buildings exhibit Hindu characteristics. Noticeable examples are the town of Fatehpur Sikri, the fort at Allahabad, the palace at Lahore, and the red palace

in the fort at Agra, which last, ascribed in part to Jahangir by some authorities, maintains the characteristic Hindu feeling of the early Mughal style. Among Jahangir's contributions to Indo-Persian architecture were the tombs of Akbar at Sikandra, of Anar Kali at Lahore, and I'timad-ud-daula at Agra. Shah Jahan, under whom the Mughal power reached its climax, was the greatest of all Indian builders. There is, however, a great contrast between the manly vigour and exuberant originality of Akbar and the extreme elegance of his grandson, which rapidly tended to become effeminate. Shah Jahan built the Jami Masjid at Delhi, the inner fort and palace at Agra, the Moti Masjid, or Pearl Mosque, there also, and the Taj Mahal, perhaps the most beautiful building in the world. In these works, wrote V. A. Smith, the Indo-Persian style, by universal consent, attained supreme beauty. But the style, though essentially Persian, was distinguished from the Persian practice by the lavish use of white marble, by the *pietra dura* decorations, beautiful open-work tracery, grandeur, and elegance. His son Aurangzeb was a religious fanatic, who has left little save the mosque at Lahore, another small one at Benares, and the tomb at Aurangabad. The reign of this bigot was marked by a rapid decline in art, including architecture; the Persian style, consequently, showed marked deterioration. "In many places modern architects have effected a graceful compromise between the Hindu and Muhammadan styles by combining Persian domes with Bengali bent cornices and Hindu or half-Hindu columns. Excellent examples of this pretty though feeble style, as used for both civil and religious buildings, are to be seen at Mathura (Muttra) and in hundreds of other localities. It is quite impossible to tell merely from inspection of the architecture whether a building is intended for Muslim or Hindu use" (V. Smith, pp. 419-20). Foreign innovations, he adds, were subjected to the irresistible pressure of native taste and methods. In Sind the style was Persian, both in form and decoration. The later examples of Mughal architecture at Lucknow have been described as shoddy and pretentious. The style of the Muhammadan dynasty of Mysore (1760-99), though not so degraded as Lucknow, was poor and inartistic.

As mosques in India always face East, they should be seen of a morning.

Among other styles should be mentioned the ruins at Martand and other places in Kashmir, which bear evidence of classical influence, and the modern Golden Temple of the Sikhs at Amritsar.

The *Burmese* pagoda, with its thin spire, has been evolved from the solid hemispherical dome of the Buddhists. The best examples are at Prome, Pagan, Rangoon, Mandalay, Pegu, and Moulmein. A small example may be seen in the Eden Gardens, Calcutta.

THE PRESERVATION OF ANCIENT MONUMENTS AND ANTIQUITIES

As the architectural monuments of India will specially attract the attention of visitors, so the means taken for their preservation is bound to be a subject of interest. In the earlier days of British rule the Government was too much concerned with laying the foundations and extending the borders of its new Empire to pay much heed to the relics of old ones, and though a few spasmodic efforts were made, notably by the first Lord Minto, by Lord Hastings, and Lord Amherst, to save a few of the most celebrated structures round Agra and Delhi from decay, they resulted only in the accomplishment of some perfunctory repairs. The first real step towards asserting official responsibility in archæological matters was taken by Lord Canning, who in 1860 established the Archæological Survey of Northern India. The function of the new Department, however, as well as of the local surveys which were afterwards instituted in Madras and Bombay was confined to the description of monuments and to antiquarian research, the critical task of conservation being still left to the Local Governments, who made fitful efforts to discharge it according to the personal interest of successive Governors or Lieutenant-Governors, but always without expert guidance or control. In 1871 Gen. Sir Alexander Cunningham was appointed Supt. of the Archæological Survey. He was handicapped by the conditions under which he worked; but he was a great pioneer who, by his undoubted gifts and devoted labour, laid in many directions the foundations of the success subsequently achieved.

It was not until 1878 that the Supreme Government awoke to the deplorable condition into which the national monuments were steadily sinking, and the then Viceroy, Lord Lytton, allocated a sum of 3½ lakhs to the repair of buildings in the N.W. Provinces, and pressed for the appointment of a special Conservator to guide and control the operations of the Local Administrations. This post was sanctioned two years later, and was held for three years by Major Cole, who accomplished much during that brief period towards the repair of various famous structures, notably those in the Gwalior fort and at Sanchi. Then reaction set in; the post of Conservator was abolished in 1883, that of the Director-General six years later, after which there followed a period of almost complete apathy and neglect. In 1895 came another change of policy, when proposals were made to parcel out the country into several circles, each with its own archæological surveyor, who was to make conservation his first and foremost duty. This scheme, which, be it remarked, made no provision for the exercise of any central control, was still being considered when Lord Curzon became Viceroy and threw himself

with characteristic energy into the task of organising the whole Department on a firm administrative basis and of asserting definite—and, it is much to be hoped, permanent—Imperial responsibility. With this end in view the Provincial Departments were established on a more efficient and liberal footing, and were united together under the control of a Director-General, provision at the same time being made for assisting local Administrations out of Imperial funds. Further—the functions of the new Department were closely defined and systematic principles laid down for its guidance, special prominence being given to the conservation of monuments—without, however, prejudicing other fields of labour. Finally, in its efforts to safeguard all classes of historic monuments and relics, Lord Curzon's Government took extensive powers by legislation for the protection of those in private possession, as well as for State control over the excavation of ancient sites and traffic in antiquities; and, by dint of encouragement and assistance, secured towards the same object the active co-operation of the Ruling Chiefs.¹

The result of these wise and comprehensive reforms has since become manifest in the changed conditions of the ancient buildings of India and Burma. Under the direction of Sir John H. Marshall, C.I.E., Litt.D., F.S.A., the Archæological Department has during the last two decades overhauled all the more important groups of monuments, besides a multitude of isolated relics throughout the country, and has prosecuted a vigorous and far-reaching campaign of repair among them, at the same time formulating a systematic programme for their future treatment. Those who visited the great monuments of India before Lord Curzon's Viceroyalty will realise the extent of the work accomplished since then. At the Taj Mahal at Agra, for instance, the surroundings have been changed from squalor to loveliness. At the Agra, Delhi, and Lahore Forts, the buildings have been conserved, renovated, and beautified. At Ajmer, the embankment of the Anasagar Lake can boast of, perhaps, the most complete transformation of all: the pure white marble pavilions of Shah Jahan have been reconstructed with scrupulous care from the dismantled materials. Other famous and beautiful fabrics of the Mughals which have been rescued from deep-seated decay are the mausolea of the Emperors Humayun, Akbar, and Jahangir; the small but priceless tomb of I'timad-ud-daula and the Chini-ka-rauza at Agra; the tomb of Isa Khan at Delhi, the mosque of Dai Anga at Lahore, and the so-called Zenana Palace in the fort of Allahabad.

It would take too long to speak of the Department's achievements

¹ Mention should be made, in this connection, of the excellent work which has been done of recent years in the Gwalior State and, under the supervision of Mr G. Yazdani, in the Nizam's dominions.

at the other main centres of Muhammadan power—at Mandu, the mighty fortress of the Malwa Kings, and at Dhar, in Central India ; at Ahmadabad and Bijapur, in Bombay ; or at Gaur and Pandua in Bengal and at Rohtasgarh in Bihar. Suffice it to say that what has been done among the Mughal remains has been done in equal measure among these earlier groups of Moslem architecture, and in an equal measure, too, among the Hindu and Buddhist monuments in both India and Burma. The excavations which are in progress at Nalanda, in Bihar, have revealed important Buddhist remains which date from the 6th to the 12th century. To the east a range of eight great monasteries has been laid bare, and corresponding to it a range of imposing *stupas* with a broad avenue between the two, closed at its S. end by two more monasteries. The richest stratum is associated with the name of Devapala (9th cent. A.D.). Many bronze and stone statues have been found—both of the Buddha or Bodhisatvas, and of Hindu deities such as Vishnu and Ganesha. The temples of Khajraho and Bhubaneswar, of Conjeeveram, Sompalle, and Vellore ; the royal palace and monasteries at Mandalay ; the pagodas of Pagan ; the vast array of civil and religious edifices at Vijayanagar ; the topes at Sanchi and Sarnath ; the sculptured cave temples of Western India and Orissa ; and the Mutiny monuments at Lucknow—the Residency, Dilkusha Palace, and Sikandar Bagh—all these and many more besides, that have been singled out for their historic associations or the exquisite beauty of their architecture, have been taken in hand and protected against the further ravages of time. A special feature of all this work has been the rescue of many of these buildings from profane and sacrilegious uses and their restitution to the faith of their founders—or, at least, to safe custody as protected monuments.

In conclusion, it remains to be said that the Archæological Department has undertaken, for the first time in India, the scientific exploration of buried sites, and by its investigations at Taxila, Charsadda, Sahri Bahlol, Shah-ji-ki-dheri, Bhita, Sarnath, Kasia, Saheth - Maheth, Harappa, Mohendojaro, Nalanda, Hmawza (old Prome), and elsewhere, has thrown a flood of new light on the architecture and art and history of early India and Burma. In the collections of antiquities made at these sites, and in other collections which the Department has brought together at Peshawar, Delhi, Muttra, Sarnath, Mandalay, Pagan, and other places, the student of Indian archæology will now find an abundance of materials systematically arranged and catalogued. In particular, the exhibits in the new Museum at Taxila (opened to the public in April 1928) include the only connected groups of ancient clay and plaster known to exist in India, and the only considerable collection of domestic utensils, implements, ornaments and the like yet recovered from any site of the historic period.

INDIAN ART¹

INDIAN ART is a by-product of religious emotion, and essentially part of the life of the people, not however to be classified according to creed, but according to period and place. Its tradition is held by many to be a priceless heritage of the Indian peoples.

The history of Indian Art may be said to begin with the Mauryan Emperor Asoka (274 to 237 B.C.), who proceeded to make Buddhism the state religion of India. The expression of the early art was therefore almost entirely Buddhist. Asoka's monolithic columns, some thirty of which he is known to have erected, show by their design and technique that they represented an offshoot of a Western Asiatic culture which had its focus in Achaemenid Persia. Asiatic Hellenistic forms are readily distinguished. But whatever Indian sculptors borrowed they made their own in character. The Hellenistic influence is most marked in the architectural remains of the north-west, where, in the country known as Gandhara, a Graeco-Buddhist art flourished in the first centuries of the Christian era. With the revival of Brahmanism about the 4th century A.D. the art becomes more purely Indian in intention, and under the Imperial Guptas (circ. 350 to 500 A.D.), it assumed a very rich and varied character. The buildings of the period after the decline of this Hindu dynasty depict mainly a continuation of the Gupta style, which however terminated over the greater part of the country with the inroads of the Muhammadans about 1200 A.D.

The conquest of India by these Central Asian hordes, changed very largely the character of its art, introducing into it entirely new elements and features. This specially applies to the arts of Northern India, in the south the influence of Islam is much less marked. In the course of time a strong current from Persia set in, the result of the flourishing condition of that country under the rule of Shah Abbas, and the arts became appreciably Persianised.

A method of expression in which the Indian artists were notably proficient was that of painting. During the Buddhist period this took the form of frescoes on the walls of the rock-cut temples, although no doubt a similar process was also employed to decorate the less permanent structural edifices. The excavated halls of Ajanti contain mural pictures of surpassing interest and beauty dating from the first centuries of the Christian era. The art seems to have declined in the period corresponding to the Middle Ages, but was revived in the sixteenth century under the patronage of the Mughal Emperors, but in the form of miniature painting of Islamic subjects.

¹ The section on Indian Art has been revised by Mr Percy Brown.

Encouraged by this artistic dynasty, the Mughal school of painting rose to great heights, especially in the field of portraiture. Contemporary with this there also flourished an indigenous school of miniature painting, Hindu in intention, which was practised chiefly in Rajputana, and is usually referred to as the Rajput school. But the art declined with the decay of the Mughal power.

Under British rule the arts have been fostered by the maintenance of several Government schools of art, which have done much to stimulate interest in the subject. Certain art crafts which were dying out have been resuscitated, others for which there has been a demand owing to changed conditions, have been brought into being, while the influence of these institutions generally on the public taste has been all for the good. Recently a scheme has been devised whereby a selected number of art students are to be employed in the decoration of some of the buildings at New Delhi, from which practical experience good results are anticipated.

Much of the finest craftsmanship of India is, however, found in the field of the applied arts such as metal work, carving, jewellery, weaving, dyeing, and embroidery. In these directions the Indian artisan is remarkable for his patience, accuracy of detail, thoroughness, and artistic sense of both colour and form. The elaboration of ornament in the best Indian metal ware or carving, the composition of colours in the best Indian carpets, or enamel, and the form of the best Indian pottery, have seldom, if ever, been excelled. Much of the skill of the Indian handicraftsman is due to the hereditary nature of his occupation. The potter, the carpenter, the smith, the weaver, each belongs to a separate caste; a son inevitably follows the trade of his father, and the force of custom, with generally a religious basis, impels him to imitate his father's work. The result is that the form and workmanship of artisan work is almost exactly the same now as it was thousands of years ago, and that the artisan, with great technical and imitative skill, has little creative power. While the caste theory holds generally, carpenters, stone-carvers, and even smiths, not unfrequently work in any material indifferently, like certain workers in mediæval Europe. The combined competition and prestige of Europe have created a tendency to imitate European methods. The best work used to be done, at leisure, to the order of the wealthy Princes and nobles of an ostentatious court. Many of these courts have now ceased to exist, while others have declined in purchasing power and in influence. The authority of the trade guilds, and of caste, has been relaxed under the freedom of British rule, and the importation of British goods has materially affected certain crafts. British supremacy, having produced peace, has almost destroyed the armourer's trade,

which is now diverted into damascening curios at many places ; the fancy cheap cotton goods of America and Britain have displaced the muslins of Dacca ; aniline dyes and jail work have nearly killed the old carpet industry. In South India the indigenous Art industries have to some extent decayed, but in recent years there has been an unquestioned revival of the handicrafts of the Madras Presidency, the artisans being encouraged by the sale of their work at the Victoria Technical Institute, Madras.¹

Nearly every Indian village has its *potter*, who is kept constantly at work making domestic utensils of baked clay, for in many households no earthen vessels can be used a second time. The forms of the utensils which he makes are of great antiquity and beauty. The best glazed pottery is made in the Panjab, of blue and white, and in Sind, of turquoise blue, copper green, dark purple, and golden brown, under an exquisitely transparent glaze. The usual ornament is a conventional flower pattern, pricked in from paper and dusted along the pricking. The Madura (p. 673) pottery deserves mention for the elegance of its form and richness of its colour. In the Panjab and Sind, and especially at Tatta (p. 409) and Hyderabad, there are many good specimens of encaustic tiles on the old Muhammadan mosques and tombs. One of the finest examples is the mosque of Wazir Khan at Lahore (p. 365).

Metal work is now chiefly exhibited in caskets, trays, salvers, vases, bowls, jewellery or personal ornaments, perfume-boxes, etc., with great attention to decoration, rather than in military arms and implements. The Panjab has long produced *gold* and *silver* work, and especially parcel-gilt *surahis*, or water-vessels, of elegant shape and delicate tracery. The gold and silver ware of Kashmir, Cutch, Lucknow, Bombay, Ahmadnagar, Cuttack (p. 504), is worthy of mention ; Tanjore produces silver work on brass and copper. The hammered repoussé silver work of Cutch is of Dutch origin. The embossed silver work of Madras, with Dravidian figures in high relief, is called Swami ware.

Domestic utensils in *brass* and *copper* are made all over India, the Hindus using the brass and the Muhammadans the copper. The copper bazar of Bombay is celebrated, and so is the brass and

¹ Mr T. N. Mukharji's *Art Manufactures of India* (Calcutta, 1888), and Sir G. Birdwood's *Industrial Arts of India* (Chapman & Hall, 1880), may be consulted ; also the *Journal of Indian Art and Industry* (1883 onwards) may be recommended as containing much valuable information. It is however difficult to procure these books. See also *Arts and Crafts of India and Ceylon*, by A. K. Coomaraswamy (T. N. Foulis, Edinburgh, 1913), and *Indian Art at Delhi*, by Sir George Watt and Percy Brown (Calcutta, 1903). Among the most recent books are *Indian Painting*, by Percy Brown (Oxford, 1927), *Indian Painting under the Mughals*, by Percy Brown (Oxford, 1924), and *Indian Sculpture and Painting*, by E. B. Havell (Murray, 1928).

lacquered ware of Moradabad (p. 424). Benares and Jaipur are famous for cast and sculptured mythological images and emblems. Plates, cups, jewellery, etc., of *kānsā* (bell metal) are made at Burdwan (p. 67) and Midnapore (p. 502). Other places noted for brass and copper ware are Nagpur, Ahmadabad, Nasik, Poona, Murshidabad, and Tanjore. The Kashmir and Peshawar ware has marked Persian features. Nepalese brass work shows itself in lamps of various shapes, incense-burners, boxes, bells, drinking-cups, of interesting forms and beautifully decorated.

The artisans of India were formerly very skilful in the use of *iron* and *steel*. Fergusson said of the iron pillar in the Kutb Mosque at Delhi (p. 317), to which he assigns the date of A.D. 400, that "it opens our eyes to an unsuspected state of affairs to find the Hindus at that age capable of forging a bar of iron larger than any that have been forged even in Europe up to a very late date, and not frequently even now. It is almost equally startling to find that, after an exposure for fourteen centuries, it is unruined, and the capital and inscription are as clear and as sharp as when the pillar was erected" (see also p. 515).

Enamel is an artificial vitreous mass, ground fine, mixed with water, applied with a spatula, and fixed by fusion. In the champlevé enamelling of Jaipur—the best in India, perhaps in the world—the colours are placed in depressions hollowed out of the metal, and are made to adhere by fire. The Jaipur artist is renowned for the purity and brilliance of his colours and the evenness with which they are applied. He is particularly famous for a fiery red (pigeons' blood), which is unique. For enamel on gold—besides Jaipur—Delhi and Benares may be mentioned; on silver, Multan, Bahawalpur, Kangra, Hyderabad (Sind), Karachi, Abbottabad (p. 381), Bhuj Cutch (p. 233), Lahore, Kangra (p. 348), and Kashmir; on copper, the Panjab and Kashmir. A quasi-enamel, of which the mode of preparation is kept secret, is made of green colour at Partabgarh, and of blue at Ratlam (p. 154). *Glass* was known in India at the time of the *Mahabharata*; glass bangles and other ornaments are made all over the country. Alwar produces engraved gold and silver *plate*, and *book-binding*.

The splendour of Indian *jewellery* is due to the free use of diamonds, rubies, emeralds, and other gems, some of them mere scales so light that they will float on water. A dazzling variety of rich and brilliant colours is thus produced by means of gems which are valueless except as splashes, points, and sparkles of gorgeousness. Rings for the fingers and toes, nose and ears; bracelets, armlets, anklets, nose studs, necklaces made up of chains of pearls and gems; tresses aigrettes and other ornaments for the head and forehead;

chains and zones of gold and silver for the waist—such are the personal ornaments in daily use amongst men and women, Muhammadans and Hindus. One reason for the great popularity of gold and silver jewellery is that it is portable wealth, easily preserved. The silver filigree work—an art of very ancient origin—of Cuttack, Dacca, and Ceylon, generally with the design of a leaf, is remarkable for delicacy and finish. For gold and silver jewellery, Trichinopoly, Vizagapatam (p. 518), Delhi, and Ahmadabad are noted. Silver fish, flexible-jointed, are made in the Monghyr district. Each article of Bhutan jewellery is a work of art. The best enamelled jewellery comes from Jaipur, Delhi, Benares, and Hyderabad (Deccan.) The old Delhi work in cut and gem-encrusted jade is highly prized. The *pietra dura inlaid work* of Agra, seen at its best in the Taj Mahal, might have been introduced by Austin de Bordeaux. While Florentine in origin and style, the designs have a thoroughly local character.

Skilful *carving* is done at Bombay in black wood, for doors or furniture, in a style derived from the Portuguese. At Ahmadabad the black wood is carved into vases, inkstands, and other small objects. Jack wood also is carved in rectangular forms at Bombay. Sandalwood is carved and commonly enriched with ornament in marquetry at Bombay, Surat (p. 194), Ahmadabad (p. 204), Mysore, and Travancore; ebony at Nagina (p. 424) and Bijnor; ivory at Amritsar, Delhi, Benares, and Vizagapatam. Wood-carving is universal throughout Nepal, Sikhim, and Bhutan. Nepal excels in it; many of the houses and all the temples are most beautifully ornamented and decorated, the doors, windows, eaves, etc., being profusely carved. Sylhet (p. 495) is noted for its ivory fans, Ratlam for its ivory bracelets, and Vizagapatam for boxes of ivory and stags' horn. Ivory-carving is carried on in the Travancore State, and is widely known through the Trivandrum School of Arts. Figures of animals and of the gods are carved in white marble at Jaipur, Ajmer, and in Rajputana generally. Excellent building stone, as, for example, the white marble of the Taj and of the Calcutta Victoria Memorial (p. 117), is found in Rajputana, where it is carved for architectural purposes. At Fatehpur-Sikri (Agra) models of the ruins are carved in soapstone. Models in clay of fruit and figures are admirably made at Lucknow, Poona, and Krishnagar. In the cities of Gujarat, and wherever the houses are made of wood, their fronts are elaborately carved; this is especially the case in various cities in the Panjab, notably in Lahore. Certain towns in the Panjab, notably Hoshiarpur and Gujarat, are centres of wood-carving.

India was the first of all countries that perfected weaving, embroidery not being practised until after the Muhammadan invasion.

The Greek name for cotton fabrics, *sindon*, is etymologically the same as India or Sind. The word chintz is from the Hindu *chhintā*, or variegated, while calico is from the place of its production, Calicut (p. 650). In delicacy of texture, in purity and fastness of colour, in grace of design, Indian cottons may still hold their own against the world—but not in cheapness. The *phulkari* (a red cotton fabric embroidered all over with coarse coloured silk) is common everywhere. The famous Dacca muslin (p. 494), one pound weight of which could be made to cover a fabulous extent, is now superseded by the machine-made goods of Europe and America; and European chintz now takes the place of the palampore (*palangposh*), a kind of bedcover of printed cotton produced at Masulipatam. Painted cottons have always been a famous Madras industry. *Weavers* generally are in reduced circumstances, through European competition; but efforts are being made to revive their art. In the Panjab the weaver's trade still flourishes, but large quantities of the cheaper cottons are now made in India by machinery. In Nepal, Sikhim, and Bhutan the weavers work in cotton, wool, and silk, producing excellent patterns and colouring. Pure *silk* fabrics—striped, checked, and figured—are made at Lahore, Agra, Benares, Hyderabad (Deccan), and Tanjore. Gold and silver brocaded silks, called kincobs (*kimkhwab*),¹ are made at Benares, Murshidabad, and Ahmadabad. The printed silks which are worn by the Parsi ladies of Bombay are a speciality of Surat. Bahawalpur is noted for its damasked silks. Most of the raw silk comes from China. The Muhammadans are forbidden by their religion to wear pure silk, but may wear it mixed with cotton. Gold and silver wire, thread lace, and foil are made all over the country, for trimming shoes and caps, for stamping muslin and chintzes, for embroidery and brocades. With such skill is the silver wire prepared, that two shillings' worth of silver can be drawn out to 800 yards. The best *embroidery*, remarkable for its subdued elegance and harmonious combination of brilliant colours, comes from Kashmir, Lahore, and Delhi. The patterns and colours diversify plane surfaces without destroying the impression of flatness. Much tinsel is used, but the result has not a tinselly appearance. The famous Kashmir shawls are made of the fine, flossy, silk-like wool obtained from the neck and underpart of the body of the Himalayan goat. Originally a speciality of Kashmir, they are now made in the Panjab also, especially at Amritsar. They have greatly deteriorated since the introduction of French designs and aniline dyes generally. The finest of the woollen stuffs is called *patu* in Kangra and Kashmir. A rough but remarkably durable *patu* is made from goat's hair. The shawls called Rampur *chadars* are made at Amritsar and Ludhiana (p. 341), of

¹ This word is a hybrid, but is connected with *kin*, Chinese for gold.

Rampur wool (*pashm*, *pashmina*). The intrinsic difference between Eastern and Western decorative art is revealed in Oriental *carpets*, where the angular line is substituted for the flowing, classical "line of beauty." The Oriental carpet is also more artistically dyed, and is decorated according to the true principles of conventional design. As a rule the pile carpets of India and Persia are of floral design, while those of Central Asia, Western Afghanistan, and Baluchistan are geometric. In Persia and India the source of many of the patterns is the tree of life (though some contest this theory), shown as a beautiful flowering plant, or as a simple sprig of flowers. The *dari* is a carpet of cotton made chiefly in Bengal and Northern India ; but the most common cotton carpet is the *shatranji*, made throughout India, but especially at Agra. The principal patterns are stripes of blue and white, and red and white. In point of texture and workmanship the rugs from Ellore (p. 518), Tanjore, and Mysore are the best. Good rugs and carpets are made in Madras city. Costly velvet carpets embroidered with gold are made at Benares, Delhi, and Murshidabad. The carpets of Malabar are now the only pile woollen carpets made of pure Hindu design. Fine carpets are made at Amritsar. Sikhim and Tibet produce excellent rugs and carpets, unspoiled by the use of aniline dyes, as sufficient dyes are obtained locally. Mirzapur (p. 54) has long been famous for the carpets made there. Central Asian carpets are best purchased at Amritsar, Peshawar, and Quetta. For art manufactures in Burma, see p. 686.

CURIOS

Visitors to India, like residents in the country, are often on the look-out for curios, which, though rarer than formerly, may still be acquired by searching in bazars, shops, and backshops. They should, of course, if possible obtain the advice and assistance of friends possessed of local experience. When thrown upon his own resources, the traveller should, if he wants a good piece, go to the best dealer and be prepared to pay a decent price. A study of the best Oriental work in European and Indian museums, observation of good specimens, and a perusal of illustrated works on Indian art, will help a purchaser to some extent ; but, even when armed with such knowledge as he can gather regarding quality of workmanship and design, he must never forget the maxim *caveat emptor*. If resort is had to bargaining, the dealer will always reserve to himself a margin of profit in the bargain offered.

Special caution should be exercised in the purchase of *Oriental paintings*. Copies are so skilfully made that it is often difficult to distinguish them from the original. Expert advice is essential.

THE INDIAN ADMINISTRATION

The supreme authority in India, subject to the Secretary of State, is vested in the Viceroy and Governor-General, and his Council of six ordinary Members, and one extraordinary Member—viz., the Commander-in-Chief—who form "The Government of India." These seven Members are in charge of the Home, Industries and Labour, Finance, Railways and Commerce, Education Health and Lands, Law, and Army Departments. At the heads of each of these Departments and of the Foreign and Political Departments, is a Secretary to the Government of India.

Under the Home Department are included the subjects of the Civil Service, Justice, Police, Prisons, Lunatic Asylums, and the like ; under the Education Health and Lands Department, are Education, Local Self-Government, Public Health, Land Revenue, Surveys, Forests, Agricultural Development, Famine ; under the Railways and Commerce Department are Trade and Shipping ; under the Industries and Labour Department are Factories, Mines, Public Works, Posts and Telegraphs ; under Finance are Taxation, Currency, Mints, Banking, while Customs and Excise are administered by a Board of Inland Revenue under this Department. There are (1929) three Indians on the Executive Council of the Governor-General, in charge of the Education, Industries and Law portfolios respectively.

The Indian Constitution has no parallel either in terms of English politics or in terms of Federal Governments. The provisions of the Government of India Act of 1919, upon which it is based, are being examined by a Royal Commission of which Sir John Simon is chairman ; but at the moment of writing (March 1929) the system which is here outlined is still in operation. The Indian legislature is composed of two Chambers—the Legislative Assembly, and the Council of State. The Assembly consists of 144 members, of whom 103 are elected, 26 are nominated officials, and 15 are nominated non-officials. The composition of the Council of State, which is intended to be a second or Revising Chamber, differs materially from that of the Assembly. The total number of members is 60, of whom 27 are nominated (the maximum number of officials being 20), and 33 are elected by a much less numerous body of voters than the franchise holders for the Assembly. The non-official elected element thus predominates in both Chambers. In these two bodies is vested, save for certain powers reserved to the Governor-General and the Government of India, the whole of the legislative authority of the Central Government. The Legislative Assembly has the power of voting the Budget, save in respect of certain specific demands relating to

particular charges, *e.g.* charges for interest on loans for military and political expenditure, and the salaries paid on services recruited by the Secretary of State. Both Chambers have also the power of interpellation and of making specific recommendations to the Government of India on questions of general public interest.

The headquarters of the Government of India are, in winter, at Delhi and during the summer months at Simla. The present (1929) Viceroy, Lord Irwin, assumed office in 1926.

The army is under the control of the Commander-in-Chief, but is under the direct orders of four army Commanders, who are in charge of four areas, the Northern, Southern, Eastern, and Western Commands, into which, for military purposes, British India is divided. Under the army Commanders, there are 14 military districts.

For purposes of Civil Administration, British India is divided into a number of Provinces, nine of which, viz. Madras, Bombay, Bengal, the United Provinces, the Panjab, Burma, Bihar and Orissa, the Central Provinces, and Assam, are known as the Governors' Provinces. The heads of minor administrations, which are more directly under the control of the Government of India, are known as Chief Commissioners. The finances of the nine major Provinces are now entirely separate from the finance of the Government of India, and separate sources of revenue are allotted to the Local Governments for provincial expenditure, including such items as Land Revenue and Excise Revenue. These Local Governments have also, subject to certain limitations, power to impose additional taxation for provincial purposes, and also powers of borrowing. The administration of these Provinces is effected partly through the Governor in Council, that is, through the Governor, with the assistance of members of Council, in which Councils the numbers of Indians and Europeans are generally equal; and partly through the Governor acting with his Ministers, who are the persons chosen by him from the elected members of the Provincial Legislative Councils. This is the new system of diarchy introduced by the Government of India Act, passed in 1919, the two great principles of which are :—

- A. The decentralisation of authority from the Secretary of State and the Government of India to Local Governments.
- B. The transfer to Ministers, chosen from the elected representatives of the Province, of control over certain specific branches of the administration

The subjects controlled by the Governor in Council are generally known as reserved subjects, including in all Provinces such important branches of the administration as Law and Justice, Police,

Land Revenue, and Finance. These subjects therefore remain under the direct control of an official Government, subject always to the supervising authority of the Government of India and Parliament. The subjects under the direct control of Ministers, commonly known as transferred subjects, include equally important items, *e.g.* Education, Medical Administration, Public Works and Excise. The intention of the new system of Government is both to afford Indians an opportunity for training in the art of Government, and to vest Ministers and the Legislative Councils with full powers and responsibilities for the administration of the branches of Government transferred to them. In order to enable the Local Government fully to discharge the responsibilities cast upon them by the new system, the supervising authority of the Secretary of State and the Government of India over local Governments, an authority which was somewhat rigidly exercised in the past, has under the new Statute been strictly limited. This is particularly the case in respect of transferred subjects. Legislative authority in the major Provinces is exercised through Legislative Councils, which, under the Statute, must contain not less than 75 per cent. of elected members, and not more than 20 per cent. official members. The actual number of members varies from 139 to 53 in the smallest Province, and the Legislative Councils, subject to certain exceptions and conditions, exercise powers over Provincial Legislation and Finance, similar to those exercised by the Central Legislature in respect of Central Legislation and Finance.¹ The number of voters admitted to the provincial franchise on a low qualification is $2\frac{1}{2}$ per cent. of the population.

In all Provinces the administration is, generally speaking, divided into two branches—the Judicial, and the Executive. At the head of the former is a High Court or Judicial Commissioner, and at the head of the latter usually a Board of Revenue or a Financial Commissioner. This link in the revenue administration is, however, missing in Bombay, as the link of Commissioners is lacking in Madras. Next in the official scale come the Commissioners of Divisions, exercising control over a number of districts which constitute the administrative units of the country. At the head of each district is a Collector or Deputy-Commissioner, who is also District Magistrate, and is responsible for the administration of Criminal Justice, Police, Revenue, and all executive work in his jurisdiction. He is assisted by a number of English and Indian Magistrates and Officers at the headquarters of each district,—in some cases by officers in charge of sub-divisions of the district,—and in all cases by Indian Magistrates and Revenue Officers in charge of portions of

¹ See *The New Constitution of India*, by Sir Courtenay Ilbert and Lord Meston (University of London, 1923).

the districts, known variously as sub-divisions, tahsils, talukas, and the like. Much of the petty magisterial work of the country is done by Honorary Magistrates appointed by Government; while the management of local concerns of Municipalities and District Boards is mainly in the hands of the Indian community, selected or elected. At the Headquarters of the Provincial Governments are the Secretaries to the Government, the Inspectors-General, and other heads of the various Departments of Public Works, Police, Education, Forests, Registration, Medical Relief, and Sanitation, while under the Financial Commissioner or the Board of Revenue are usually (1) a Director of Land Records, responsible for the maintenance of the revenue records of the Province, and in the first instance for the settlements of Land Revenue, and (2) a Commissioner of Excise. The appointments are not exactly alike in all Provinces.

TWENTY YEARS' PROGRESS OF LITERACY (1901-1921).

Province, State or Agency.	Number of Literate per Mille.					
	All Ages, 10 and Over.					
	Males.			Females.		
	1921	1911	1901	1921	1911	1901
INDIA	161	140	129	23	13	9
PROVINCES	167	147	134	22	14	9
Ajmer-Merwara	210	163	142	28	17	10
Assam	144	117	89	15	8	6
Bengal	210	187	188	23	15	7
Bihar and Orissa	114	104		7	5	
Bombay, including Aden	181	158	148	30	17	11
Burma	576	496	489	123	79	57
Central Provinces and Berar	103	87	79	10	4	3
Coorg	238	194	159	64	36	20
*Madras	199	183	160	26	17	12
North-West Frontier Province	95	81	88	12	8	7
Panjab (including Delhi)	90	84	86	11	8	4
United Provinces	85	78	75	8	6	3
STATES AND AGENCIES	127	107	100	29	12	8
Baroda State	277	229	199	52	25	9
Central India Agency (including Gwalior State)	76	64	68	7	3	4
Cochin State	365	329	302	127	79	59
Hyderabad State	65	67	70	9	5	4
Kashmir State	54	53	52	3	2	1
Mysore State	163	142	—	24	15	—
Rajputana Agency	81	79	75	5	3	2
Sikhim State	101	108	125	4	4	3
Travancore State	425	329	283	178	64	39

* Excluding Cochin and Travancore.

POPULATION AND RELIGION IN BRITISH INDIA AND INDIAN STATES (1921).

Province, State or Agency.	Popu- lation in 1921 in Mil- lions.	Den- sity per Sq. Mile.	No. of Fe- males per 1,000 Males.	Number per 10,000 who are						Variation per cent. in Total Population	
				Hindus.	Musal- mans.	Budd- hists.	Ani- mists.	Chris- tians.	Others.	1911- 1921.	1901- 1911.
INDIA	318.9	177	945	6,856	2,174	366	300	150	145	+1.2	+7.1
PROVINCES	247.0	226	947	6,806	2,407	465	280	123	119	+1.3	+5.5
1. Ajmer-Merwara	.5	183	837	7,356	2,055	—	96	112	381	-1.2	+5.1
2. Andamans and Nicobars	.03	9	303	3,278	1,515	979	3,887	586	255	+2.4	+7.3
3. Assam	7.6	143	920	5,434	2,896	17	1,479	168	6	+13.8	+14.9
4. Baluchistan (Districts and Admini- stered Territories)	.4	8	650	919	8,731	4	—	159	187	+1.5	+8.5
5. Bengal	46.7	608	933	4,827	5,899	57	181	31	54	+2.7	+7.9
6. Bihar and Orissa	34.0	409	1,028	8,284	1,085	—	553	76	2	-1.4	+3.8
7. Bombay	19.3	157	901	7,658	1,974	1	64	137	166	-1.8	+8.0
8. Aden	.06	706	472	653	7,974	13	—	407	953	+22.4	+5.0
9. Burma	13.2	57	935	368	380	17	534	195	17	+9.1	+15.5
10. Central Provinces and Berar	18.9	139	1,001	8,354	405	—	1,160	30	51	—	+16.2
11. Coorg	.2	104	831	7,733	795	1	1,265	194	12	-6.4	-3.1
12. Delhi	.5	823	733	6,068	2,904	—	—	273	155	+18.1	+2.0
13. Madras	42.3	297	1,023	8,864	671	—	137	322	6	+2.2	+8.3
14. North-West Frontier Province (Districts and Administered Ter- ritories)	2.3	168	831	666	9,162	—	—	47	125	+2.5	+7.6
15. Panjab	20.7	207	830	3,181	5,533	1	—	159	1,126	+5.7	-1.8
16. United Provinces of Agra and Oudh	45.4	426	908	8,509	1,428	—	—	44	19	-3.1	-1.1

POPULATION AND RELIGION IN BRITISH INDIA AND INDIAN STATES (1921)—continued.

Province, State or Agency.	Popu- lation in 1921 in Mil- lions.	Den- sity per sq. Mile.	No. of Fe- males per 1,000 Males.	Number per 10,000 who are						Variation per cent. in Total Population.	
				Hindus.	Musal- mans.	Budd- hists.	Ani- mists.	Chris- tians.	Others.	1911- 1921.	1901- 1911.
STATES AND AGENCIES											
16. Assam State (Manipur)	71.9	101	938	7,748	1,343	12	415	249	233	+1.0	+12.9
17. Baluchistan States	4	45	1,041	5,994	465	9	3,433	106	3	+10.9	+21.7
18. Baroda State	4	5	840	834	9,663	—	—	—	3	-9.8	-1.9
19. Bengal States	2.1	262	932	8,196	763	—	767	35	239	+4.6	+4.1
20. Bihar and Orissa States	9	165	880	6,753	8,070	113	80	22	6	+9.0	+11.1
21. Bombay States	3.9	138	1,035	8,684	41	3	1,154	117	1	+4	+19.0
22. Central India (Agency)	7.4	117	965	8,390	1,135	—	90	19	866	+3	+7.2
23. Central Provinces States	6.0	116	954	8,689	553	—	666	15	77	-2.2	+12.8
24. Gwalior State	2.1	66	1,008	7,308	89	—	2,419	176	8	-2.4	+29.8
25. Hyderabad State	3.2	121	833	8,308	555	—	507	5	125	-1.3	+5.8
26. Kashmir State	12.5	151	966	8,545	1,041	—	346	60	18	-6.8	+20.0
27. Madras States (including Cochin and Travancore)	3.3	39	890	2,086	7,675	113	—	5	121	+5.1	+8.7
28. Mysore State	5.5	510	989	6,642	667	—	24	2,604	3	+13.5	+14.9
29. North - West Frontier Province (Agencies and Tribal Areas)	6.0	203	962	9,169	570	2	105	119	35	+3.0	+4.8
30. Panjab States	2.8	111	861	4,563	3,917	21	—	607	892	+74.2	+1,881.9
31. Rajputana (Agency)	4.4	119	520	5,028	3,100	6	—	9	1,857	+4.8	-4.8
32. Sikkim State	9.8	76	899	8,299	915	—	488	5	293	-6.5	+6.9
33. United Provinces States	1.1	29	970	6,678	3	3,278	—	45	1	-7.1	+49.0
		191	953	7,827	2,149	—	—	22	2	-4.6	+2.3

DETAILS OF THE WORKING OF CERTAIN IMPERIAL DEPARTMENTS

The following figures will give some idea of the enormous and increasing operations to which the Indian Administration extends. The Post Office and Telegraph Department employed in 1926-27 a staff of 124,619.

POST OFFICE

The number of Post Offices in India in 1926-27 was 20,737 ; of letter-boxes 55,707 ; and of village postmen 8,691. The length of railways and roads over which mails were conveyed was 161,289 miles. The articles conveyed comprised :—

<i>By Letter Mail</i>	<i>Million</i>
Paid unregistered letters	490'29
Unpaid letters.	21'44
Registered letters and packets (including insured and value-payable)	36'48
Post Cards	552'73
Registered newspapers	82'79
Ordinary unregistered packets	92'84

<i>By Parcel Mail</i>	
Registered parcels	14'55
Unregistered parcels	1'44
Total	<u>1293'56</u>

The inland and foreign money-orders during the year numbered 37 millions for the remission of over 89.7 crores, including 982,090 telegraphic orders for 8'47 crores. The total number of value-payable articles of all kinds sent through the post was 12,569,295, and the amount declared for recovery was over 27½ crores of rupees. The amount deposited in the Post Office Savings Banks reached 29½ crores, and the number of depositors was 2,518,142.

TELEGRAPHS

The length of telegraph lines open in 1926-27 was 98,126 m. (wires and cable 511,866 m.). The number of offices open was 153 departmental, 3,852 combined with the post—total 4,005 ; and the number of messages sent 22,061,194 (of which 382,899 were foreign messages), involving over 88½ millions signalling operations, of a value

of over 2·21 crores. The total receipts exceeded the total charges of the year by 10 lakhs.

The number of wireless stations open in 1926-27 was twenty-three including six coast stations. The number of radio-telegrams exchanged between the coast stations and ships at sea, was 23,476.

TELEPHONES.

On the 31st March 1927 there were 271 exchanges with 17,115 connections maintained by Government. The number of exchanges owned by the licensed Telephone Companies were eighteen, with 28,384 connections.

RAILWAYS

Railway progress is a mirror of India's financial history. In 1872, the mileage was 5,369; at the end of 1926-27, it was 39,049. This mileage is considerably larger than that of France. Of this total, 19,367 m. of railway were of the standard gauge ($5\frac{1}{2}$ ft.), 15,932 of the metre gauge (3 ft. $3\frac{3}{8}$ in.), and 3,750 of smaller (special) gauges. The railways are worked on different systems, including State lines worked by Companies and State lines worked by the State. The total number of passengers carried in 1926-27 was over 604 m., of whom over 578 m. were third-class passengers.

At the close of 1926-27 the actual capital outlay from the commencement of operations on all open lines amounted to Rs.788·7 crores. The gross earnings of all Indian railways in 1926-27 amounted to 112·4 crores. The percentage of net earnings on the total capital at charge was 5·4 in 1926-27; and 5·3 per cent. in the case of State lines. At the end of 1926-27 there were 2,855 m. under construction, or sanctioned for construction, including all the gauges.

The control of railways and railway schemes is exercised by a Railway Board which, as now constituted, consists of a Chief Commissioner, a Financial Commissioner and two members, one of whom deals with technical subjects and the other with general administration, personnel and traffic.

COMMERCE AND TRADE

India is normally a creditor country with trade balances in her favour; but had adverse balances in 1920-21 and 1921-22. The pre-War average of private merchandise was—imports 145·8 crores, exports 224·1 crores. The War average was—imports 147·8 crores,

exports 224·1 crores. In 1927-28 there were 249·9 crores of imports, and 328·7 crores of exports (including re-exports).

"The trading power of India depends primarily on the success of its crops," and these, of course, are affected by the climatic conditions of the year, which vary in different parts of the country. The exports and re-exports represent 62 per cent. of the grand total of trade. Of the total imports of 1927-28, 55 per cent. was with the British Empire (48 being with the United Kingdom); and of the total exports (excluding re-exports), 40 was with the British Empire (25 being with the United Kingdom). In 1926-27, the imports were 231 crores, and the exports 309 crores.

In 1914-15, 7950 steamers and sailing vessels entered and cleared at Indian ports, with a tonnage of nearly 12·8 million tons; in 1927-28 the figures were 6794 steamers, etc., aggregating 15·6 million tons. Figures of the trade, imports and exports, of articles of all kinds are to be found in the annual official *Review of the Trade of India* (printed in India and presented to Parliament).

FINANCIAL DETAILS

The principal sources of revenue and heads of expenditure of the Central Government (*exclusive* of the figures for nine Provincial Governments, of which estimates were, revenue, 94·3 crores and expenditure 96·3 crores) were, according to the Budget Estimates for 1928-29, as follows:—

REVENUE.		EXPENDITURE.	
	Crores of Rs.		Crores of Rs.
Customs	50·2	Direct Demands	4·2
Taxes on Income	17·0	Salt and other Capital Outlay	0·1
Salt	7·0	charged to Revenue	
Opium	3·5	Railways, Interest, and Miscel- laneous Charges	33·0
Other Heads	2·2	Irrigation	0·2
Railways, net	38·5	Posts and Telegraphs	0·8
Irrigation, net	0·1	Debt Services	14·9
Post and Telegraphs	0·6	Civil Administration	11·7
Interest	2·9	Currency and Mint	0·7
Civil Administration	1·0	Civil Works	1·7
Currency and Mint	2·5	Miscellaneous	4·3
Civil Works	0·1	Military Services	58·0
Miscellaneous	0·8		
Military Receipts	2·9		
Extraordinary Receipts	0·3		
	<hr/> 129·6		<hr/> 129·6

The total figures of estimated Revenue and Expenditure in 1928-29 were Rs.1,29,64·75 lakhs and Rs.1,29,59·69 lakhs respectively, which show a Revenue surplus of Rs.5·06 lakhs.

The total permanent debt of India on 31st March 1927 was Rs.374 crores raised in India and £339 millions raised in England. In 1914

the figures were Rs.146 crores and £177 millions respectively. The major part of this debt is charged to commercial undertakings such as railways, irrigation, and posts and telegraphs. There was a Gold Standard Reserve of £40,000,000 at the end of March 1928.

The estimates for 1929-30, which were presented on 1st March 1929, were of a less satisfactory character. Although the revised figures for 1928-29 showed a surplus of 30, instead of 5, lakhs, the whole of this amount, together with Rs.60 lakhs from the Reserve Revenue Fund, was required to meet an estimated deficiency of Rs.90 lakhs (£675,000) for 1929-30, the total expenditure for that year being estimated at Rs.13,406 lakhs (about £100,000,000), and the revenue at Rs.13,316 lakhs.

IRRIGATION

The history of irrigation in India stretches back into remote antiquity, many of the modern works being founded upon ancient works which have been restored and extended. The storage of water in tanks is very common in Southern India. The works are for the most part of indigenous origin, but much has been done by the British in repairing old tanks and constructing new ones in Madras, the Bombay Deccan, and Ajmer. In many places the Indians have made artificial lakes with dams, which are often of great architectural beauty. In the more level tracts of the South every declivity is dammed up to gather the rain. Innumerable wells cover the whole country; and it is very usual for the upland cultivator to make his own tiny irrigating stream, carrying it along the brows of mountains, round steep declivities, and across yawning gulfs and deep valleys, his primitive aqueducts being formed of stones and clay, the scooped-out trunks of palm-trees, and hollow bamboos. To lift the water a bucket-wheel, worked by men and oxen or buffaloes, is employed where the water is more than 40 ft. below the surface, and the Persian wheel, with a line of earthenware vessels on the ropes which run over it, where the water is nearer the surface in N. India. A good part of the Panjab and the whole of Sind would be scarcely habitable without irrigation; and it is practically indispensable also in the South-east of the Madras Presidency.

The greatest British engineering works in India have been in canal irrigation, the water being drawn directly "from the larger rivers, which, drawing their water from lofty mountain ranges, can, even in times of drought, be depended upon for an unfailing supply"; the water is conducted into either a "perennial," or an intermittent—*i.e.* an "inundation"—canal. A perennial canal is furnished with permanent headworks and weirs, and is capable of irrigating large

tracts throughout the year independently of rainfall. Formerly irrigation works were divided into major and minor works. The major were subdivided into productive public works, financed by borrowed capital, and protective public works, financed from current revenue and designed as a protection against famine. Since 1920-21 this system of classification and finance has been altered, and all irrigation works for which capital and revenue accounts are kept are classed as either productive or unproductive. The ninety-three productive irrigation and navigation canals working at the end of 1927 had a total mileage of 47,786 miles, of which the Panjab had 16,038 and the Madras Presidency 12,464. The total area irrigated by this class of works was 19·5 million acres. The unproductive works had a mileage of 17,751 at the end of 1927, and irrigated 3·7 million acres.

The capital outlay to the end of 1926-27 was 67·44 crores on productive works, and 40·62 crores on unproductive works. The gross revenue was 11·5 crores and the working expenses 4·5 crores; the net return on the capital invested is, therefore, 6·5 per cent. It follows that, beside making agriculture possible in tracts where, without an assured supply of water, nothing would grow, and protecting large areas from famine and scarcity, the irrigation works of India form also a remunerative investment.

Some of the oldest canals continue to be the most profitable. For example, the Eastern Jumna Canal, completed in 1830, and irrigating 350,075 acres, paid 35·71 per cent. on its capital outlay in 1924-27. But the Lower Chenab Canal, completed in 1899-1900, and irrigating 2·56 m. acres, paid 55·08 per cent. The average water rate varies from Rs.5 per acre in the Panjab, to R.1 in the Central Provinces. How light these charges are may be easily inferred from the fact that the estimated value of the crops grown on Government irrigated land amounts yearly to considerably more than the total capital expenditure on the works. The total area irrigated by all Government irrigation works (representing 13 per cent. of the entire cropped area of the country) was 28·2 m. acres in 1926-27; in 1878-79, it was only 10·5 m. acres. About another 5 per cent. of the cropped area is irrigated in a normal year from wells; and about 6 per cent. from other sources, such as private canals, tanks, water raised directly from rivers, and so on.

One of the largest irrigation works so far executed in India is the Triple Canal Project, completed in 1917, by means of which the surplus waters of the Jhelum are transferred to the Lower Bari Doab. The three canals—Upper Chenab, Lower Bari Doab and the Upper Jhelum—irrigate altogether 2·03 m. acres; and the Upper Chenab is the largest perennial irrigation canal in the world. A huge extent of waste land has been brought into cultivation.

Other great irrigation projects have been inaugurated or are in hand, such as the Sarda scheme (p. 426) in Oudh, the Sukkur barrage (p. 412) in Sind, the Nira canals (p. 543) in the Bombay Presidency, and the Sutlej Valley project (pp. 219, 354, 400) in the Panjab. Almost every other province has a scheme in preparation, and it is estimated that, by those which are likely to be completed within a reasonable time, over 6 million acres will be added to the irrigated area ; while by the time all the projects under construction are in full working order, a total of 40 million acres under irrigation is expected.

FAMINE

The importance of irrigation will be fully realised from the figures of the last great famines from which the country has suffered.

In 1896-7 the areas affected were 194,000 sq. m. in British India and 82,000 sq. m. in the Indian States, the population of the two areas being 45,000,000 and 7,000,000, of whom 4,250,000 were on State relief works in June 1896. In 1899-1900, famine extended to 175,000 sq. m. (population 25,000,000) and 300,000 sq. m. (population 30,000,000) in British India and Indian States, and no less than 6,500,000 people were in receipt of relief in August 1900. The distress of 1907-8 affected an area of 66,000 sq. m. and a population of 30,000,000. In 1919, with a crop failure as bad as in 1899, the number on relief was only one-tenth of the number in 1900. And again in 1920-1921 the proportion on relief was less than 3 per cent. of the population of the stricken area.

The recurrence of famine is accepted as a normal feature in the administration of India, and due provision is made beforehand for providing relief whenever that may be required in consequence of the failure of the periodical rains on which the crops depend. Famines occurred in India long before the British entered the country, and contemporary writings show that the mortality was terrible, even to so late as 1769-70, when one-third of the people of Bengal died, it is said. After the famine of 1876-8 (chiefly in Madras and Bombay) the Famine Commission of 1880 was appointed, and there have been other Commissions in 1898 and 1901. The whole subject of famine-relief administration has been thoroughly investigated, elaborate codes of instructions have been prepared for each Province, the symptoms of impending scarcity are carefully watched, the means of communication have been greatly improved, so that trade and the supply of food to meet demand have been enormously facilitated, with the result that food is now always made available in any famine-stricken tract : relief works are provided, on which famine labourers can earn a subsistence wage, and

gratuitous relief is given to all incapable of working. Famine mortality is, therefore, checked so far as human efforts can arrest it ; but much sickness and disease may often occur in times of scarcity. By the canals and other irrigation works the crops are annually secured over large tracts of country.

THE MATERIAL CONDITION OF THE PEOPLE OF INDIA

It is impossible to enter in detail upon so wide a subject, covering the conditions of the daily life of 319 millions of human beings spread over an area of 1·8 m. sq. miles ; but the broad fact that the material conditions of the people have greatly improved under British rule, and particularly during the last 20 or 30 years, stands beyond dispute. Famine is the test of economic welfare in India, and the increasing resistance that the people have been able to offer to that calamity signifies a strengthening of the average Indian's economic position. Various statistics indicate a greater spending capacity in the people. Railway returns show that even the poorest section of the people can afford to travel more largely than in the past. Cigarettes, mineral waters and other simple luxuries are now enjoyed by the masses. Savings bank deposits and membership of co-operative societies are continually increasing. Small industries are springing up in the villages. In the case of agriculture, the increase in the value of the land has been greater than the considerable rise in the price of grain which has marked the last two decades. Direct evidence of a rise in the standard of living of the Indian agricultural masses is, however, meagre.¹ In 1899 it was estimated that the average income per head was Rs.30 ; and on the 23rd February 1921 it was mentioned officially in the Council of State that on the same basis of calculation it was about Rs.50 in 1920. But it was also pointed out that the method adopted in both these cases was defective, and that a more comprehensive estimate showed Rs.80 as the average income. The most careful estimate that has hitherto been made in this direction comes from Madras, according to which the average annual income in that Presidency works out at a little over Rs.100 per head. Similar inquiries made in Bombay and the Panjab at about the same time yielded analogous results. As against this rise in income must be set the rise in prices, since the purchasing power of Rs.100 in 1920 was only 40 per cent. greater than that of Rs.30 in 1889. Nevertheless, although the rate of progress is very slow, and although many adverse factors are still at work, it can be said that there are distinct signs of change in the Indian villages, which are wholly to the good. It must

¹ *India in 1927-28* : statement prepared for presentation to Parliament (4s. 6d.), pp. 87, 95.

always be borne in mind that India is preponderantly a rural country. Out of the total population (including Burma and the Indian States) of 318,942,480 recorded in 1921, less than $3\frac{1}{2}$ millions live in cities with a population of 100,000 and upwards, of which there are 35; and about $3\frac{1}{2}$ millions live in the 54 towns whose population varies between 50,000 and 100,000. The policy of active stimulation of economic development upon which the Government has embarked must therefore always be primarily concerned with the condition of the agricultural population. A new census will be taken in 1931, and should show how far, if at all, the industrialization and urbanization of India have proceeded.

THE GROWTH OF POPULATION

Many regard the rate of growth of the Indian population with considerable misgivings. In the decade 1901-1911, it increased by about 21 millions, or by 7·1 per cent. The decennium 1911-1921 saw an increase of only 1·2 per cent., but that is because the influenza epidemic of 1918-19 wiped off almost the whole of the natural increase of the period. According to the registration figures, the survival rates varied between 6·5 and 10·6 per mille in the period 1910-17, thus showing a steady increase from year to year. The figures for 1926 show 8,395,679 births and 6,460,610 deaths; and the mean rate per mille for the five years ending 1926 was: births 33·95, deaths 25·79. This leads to the question of the pressure of population on the resources of the country. "We have a population with very considerable natural capabilities of increase. That increase is checked by ignorance of, and indifference to, maternal and infant welfare, by occasional famines, and by epidemics, such as plague, malaria and influenza. We endeavour year by year to minimise the effects of these checks. What if our endeavours should be successful? Can India support a considerable increase of population in the future under any conditions that seem likely to arise? If not, which is to lead the way to economy, the birth-rate or the death-rate, and will the other follow?" Thus asked the late Census Commissioner for India in a paper read before the Royal Society of Arts in February 1923. A complete answer to these questions is not easily framed, but the solution to the problem lies, for some time to come at any rate, in the full development of the country's rich and varied resources, which have as yet been only partially tapped.

PLAGUE

Plague in India made its recent epidemic appearance at Bombay in August 1896, but it was often widespread during the six centuries

of Muhammadan rule. The remarkable variation in the annual mortality is apparent from the figures given here :—

1896-7	57,543	1919	98,582
1904	1,143,993	1920	140,259
1915	433,866	1921	81,521
1916	276,195	1922	90,403
1917	587,404	1923	229,149
1918	621,277	(Exclusive of Indian States)	

During the year 1927 there were 49,375 cases and 32,160 deaths ; but the latest figures, which cover the period between the 1st January and the 22nd December 1928, show a total of 110,815 cases, and 81,991 deaths. Plague is local in its visitations. Many parts of India have been almost entirely free from its ravages. In some parts of the Panjab and the United Provinces the mortality has been so severe as to disorganise the labour market and to affect the level of wages. The mortality in Eastern Bengal and Assam was at no time appreciable—largely, it is believed, because the habits of the people and the structure of their houses are unfavourable to the breeding of rats, while in the Madras Presidency and in Burma the epidemic has never reached serious dimensions. The Government have not relaxed their efforts to discover and apply the most effective remedies. It is now generally agreed (1) that epidemic bubonic plague in man is directly dependent on epidemic plague in rats ; (2) that the vehicle of contagion between rat and rat and between rat and man is the plague-infested rat-flea ; (3) that bubonic plague is not directly infectious from man to man ; and (4) that the life of the plague bacillus outside the bodies of men, animals, or fleas is of short duration. It is now possible to deal satisfactorily with the disease when effective control can be established over the sanitary conditions ; in the case of the Indian army, and in limited areas such as jails, there has been remarkable success. But attempts to establish such control over large areas would involve too great an interference with the habits, prejudices, and sentiments of the people, and the application of measures of proved utility must depend upon the particular circumstances of each locality and upon the character of its inhabitants. In the face of great practical obstacles three principal measures for combating plague are now adopted—“(1) the temporary evacuation of quarters in which plague is prevalent ; (2) inoculation with the prophylactic fluid ; (3) the systematic destruction of rats, the diminution of the food supply to which they have access, and, in the course of time, such improvement in the structure of houses as shall render them reasonably rat-proof” (*Moral and Material Progress Report*, 1910-11).

Beyond a possible examination at certain railway stations, travellers are not likely to see anything connected with plague.

SANITATION

Sanitation—the care for the health of the population—is as important as any branch of Indian administration, and perhaps more difficult to cope with than any other, owing to the indifference, even the dislike, of the people in general. The whole subject, in various forms, is perpetually receiving the attention of the Government and the officers, civil and medical. It is largely a question of money, as there is any amount to be done if funds can be provided; the actual works to be undertaken, of course, require consideration and selection in order to produce the greatest benefits for the money available. Practical sanitation differs in urban and rural areas. In the largest towns great systems of filtered water-supply, sewerage, drainage, and conservancy have been introduced, and are constantly being extended and improved; in some important municipalities pure water-supply, sewerage, and drainage schemes are in working order, and conservancy, of course, in all municipalities. In villages tanks are generally set apart and protected for drinking-water; septic tanks are sometimes utilised, and bazars are improved; in rural areas drainage and conservancy are too often neglected or minimised. Schemes are sometimes undertaken for the reclamation of insanitary areas in towns and municipalities. Outbreaks of particular epidemics are met by special measures. Hospitals, dispensaries, and asylums are maintained in most places under Government or municipal management. There are Central and Provincial Sanitary Commissioners and Departments, and Sanitary Boards with staffs of medical officers, inspectors, sanitary engineers, whose duty it is to prescribe sanitary measures so far as possible, observe the occurrences and facts of any diseases, and propose remedies. There are three main classes of fatal disease—specific fevers, diseases affecting the abdominal organs, and lung diseases. Much of the sickness and mortality is due to deficient powers of resistance and to insanitary habits and surroundings. Fever is generally understood to mean malarial fever, but many causes of death and many diseases much more fatal than malarial fever are included under the common heading under which more than half the deaths are recorded. Cholera is never absent, but is greatly reduced everywhere by proper precautions in respect of the water and milk supplies. Much attention is being paid to the subject of malaria and its connection with the breeding of certain mosquitoes in stagnant water; active campaigns are sometimes undertaken for the distribution of quinine and the extermination of mosquitoes by drainage, petrolage, etc., but much remains to be done. The health of the armies, both European and Indian, has been greatly improved of

late years, as experience has been gained; and the same may be said of the jail population. Laboratories and Institutes have been established for research, special enquiries have been undertaken, and scientific publications issued for the purpose of improving the public health by combating disease in every form. Unhappily, climatic conditions, the habits and customs of the people, and the insufficiency of money, are permanent obstacles to the attainment of anything like complete success. In 1926 the All-India Conference of Medical Research Workers recorded its belief that the average number of deaths resulting annually from preventible disease was from 5 or 6 millions, that the average number of days lost to labour by each person in India was not less than a fortnight or three weeks every year, that the percentage loss of efficiency of the average person in India from preventible malnutrition was 20 per cent., and that the percentage of infants born in India who reach a wage-earning age was about 50.

THE COUNTESS OF DUFFERIN'S FUND

The Countess of Dufferin's Fund, or National Association for providing Female Medical Aid for the Women of India, was established in 1885 by the Countess of Dufferin. The Central Committee of the Fund is presided over by the Viceroy's wife as Lady President, and has its headquarters in Delhi and Simla. The Secretaries are always glad to receive visitors and to give help and information to those who wish to visit hospitals and inform themselves on the subject of medical aid for Indian women. In each presidency or province there is a Presidency or Provincial Committee, which works in co-operation with the Central Committee.

Several Local Committees affiliated to the Provincial Committees are scattered through the country, and many of these have founded and are carrying on, with assistance from local bodies, zenana hospitals officered by women, where *parda* ladies attend for treatment, and where special attention is paid to midwifery and diseases of women and children. These hospitals are all interesting, and some in the larger cities are excellent and up-to-date institutions, although still retaining special Indian characteristics. They are always open to inspection (with due regard to *parda*), and visits to those in Bombay, Calcutta, Madras, Delhi, Lahore and Karachi would well repay visitors who are interested in Indian women and the many problems concerning them.

The income from investments of the Central Committee in 1927 was about Rs.40,000; and the contributions from various sources amounted to about Rs.44,000. Since 1921 an annual subsidy of

Rs. 370,000 has been paid by the Government of India for carrying on the "Women's Medical Service." The prospects of women doctors in India have been much improved thereby, and most of the principal women's hospitals are under members of this Service. The cadre consists of 42 doctors. In recent years the Service has been rapidly Indianised; and a training reserve of Indian women graduates has been formed from which vacancies in the Service are filled. Many midwives are being trained under the auspices of the Victoria Memorial Scholarships Fund, which was collected in 1902 by Lady Curzon. One of the most interesting developments of recent years as regards medical aid for women is the establishment of a Medical College for Indian women at Delhi, eight of the professorial staff being provided from the ranks of the Women's Medical Service. (*See Lady Hardinge College.*) There are two more at the Agra Medical School and one at Madras. The Annual Report of the Central Committee can be obtained by application to the Honorary Secretary, Countess of Dufferin's Fund, Viceroy's Camp, India.

In 1920 Lady Chelmsford founded the All India League for Maternity and Child Welfare. Schools for training Health Visitors have been opened at Delhi, Lahore, Calcutta, Madras and Nagpur; and the results achieved are illustrated by the reduction in infant mortality at Lahore to 96 per mille as against 201·2 per mille recorded some years ago. A visit to the Lady Reading Health School at Delhi would greatly interest visitors. Information can be obtained from the Secretary, Lady Chelmsford League, Simla (summer), Delhi (winter).

LADY HARDINGE MEDICAL COLLEGE FOR WOMEN.

The Lady Hardinge College was initiated by the late Lady Hardinge, who recognised the great need for the training of Indian women in medicine, and the difficulties in the way of those who study in male colleges. By her efforts a sum of about 25 lakhs was collected, many generous donations being given by Indian Princes. The College was opened in New Delhi in February 1916 by Lord Hardinge, who was then Viceroy. The Principal is Miss G. J. Campbell, M.D., Ch.B., Glasgow, who is assisted by a staff of nine women professors, all highly qualified in medicine or science. The Government of India contributes 1 lakh annually to the maintenance of the College. The remainder of the upkeep is met by students' fees and endowments.

Behind the College are hostels for European, Hindu, Muhammadan, Parsi and Sikh students. The Lady Hardinge Hospital adjoining provides clinical material for the students who are being

prepared for the M.B., B.S. degrees of the Panjab University. This Hospital was opened on 17th March 1917 by Lady Chelmsford, C.I., at an interesting *parda* ceremony.

The College is situated to the West of the shopping Circus in New Delhi. It is an institution unique of its kind and well worthy of a visit from those who are interested in Indian women and the problems which affect them.

THE MUTINY OF 1857

As the Mutiny of 1857 forms, perhaps, the most important episode in the history of British rule in India, and as it is fraught with special memories, a brief sketch of the main outlines is given here. The reader, however, is referred to the more detailed accounts of the events at Delhi, Cawnpore and Lucknow, which will be found in the text (pp. 291, 439, 450).

1. *Causes of the Mutiny*

The Mutiny of 1857 was by no means unique. The first outburst, which was suppressed by Sir Hector Munro, was in 1764. A more serious rising took place in 1806 at Vellore in the Madras Presidency, but the firm hand of Colonel Gillespie averted a wide extension of the trouble. These ominous signs of impending disaster, however, went unheeded, except by a few discerning minds. Generally, there was on all sides a blind, if touching, faith in the loyalty of the sepoys.

As early as 1835 Sir Charles Metcalfe pointed out that the army was recruited from a disaffected part of the population, especially from Oudh, and that the European soldiery (whose numbers were reduced even further, just before 1857, by drafts sent to the Crimea and to Persia) were too few to be of much avail against any extensive plan of insurrection. Sir Henry Lawrence observed on many occasions that many of the officers were unfitted for the difficult task of controlling men of different races and religions. "The employment of brigadiers of seventy, colonels of sixty and captains of fifty" was bound to end in disaster. There were also many genuine causes of discontent among the sepoys; the inadequacy of their pay, frequent transfers to distant places, and a marked deterioration in their prestige and status. The General Service Enlistment Act of 1856 added fuel to their discontent in that all future recruits in Bengal were made liable for service outside the Company's dominions without extra pay. This had always been the rule in the Madras and Bombay armies, but the Bengal sepoy was a man of high caste and had enjoyed privileges in the past. He was now threatened with

loss of caste by being taken over the sea (the dreaded *Kala Pani* or black water) to Persia; and, while he held that he alone had conquered India for the Company, he believed that he was now to be used for even further conquests, without any increase of pay, in regions far from his home.

To this relaxation of discipline and to a natural discontent were allied the forces of ignorance and superstition. The prestige of England had been shaken by the disasters of the Afghan War of 1838-42; it was believed that the British had been defeated in the Crimea; and an old prophecy was revived which foretold that the Company's reign would end in 1857—one hundred years after the Battle of Plassey, 23rd June 1757. The agitators impressed upon the superstitious and credulous mind of the sepoy that the railways and telegraphs which had recently been introduced were a kind of magic designed for his humiliation; and that the new law of 1856, passed by Lord Canning, which permitted the re-marriage of Hindu widows, and the new zeal for education which was largely in the hands of Christian Missionaries were, in reality, attacks upon his religion.

It also happened that there were then a number of influential and powerful individuals who had no reason to view the rule of the Company with friendly feelings and who therefore were prepared to take advantage of the sepoys' alarm and discontent. Annexation was the order of the day. After two severe struggles with the war-like Sikhs the Panjab was annexed in 1849. Lower Burma suffered the same fate after a war in 1852; and Oudh, without conquest, in 1856. The sepoy well understood annexation after conquest; and it is significant that the conquered provinces of the Panjab and Burma remained loyal throughout the Mutiny. But there had also been a steady absorption of territory on other grounds; on the pretext of misgovernment or on the doctrine of lapse. The territory of the King of Oudh was annexed owing to persistent misrule. By the doctrine of lapse (which had not generally been applied in the past), the territory of Indian princes who died without an heir of the body were treated as lapsed to the British, an adopted heir not being recognised. Under this rule the principalities of Satara, Jaitpur, Jhansi, Sambalpur and Nagpur were resumed. It was also decided that the stipends which had been paid to those princes who had been deprived of their territories in former years should not be continued to their successors. Among others, the Nana Sahib, the adopted heir of the ex-Peshwa of Poona, Baji Rao II., once the head of the Mahrattas, was refused the personal pension of £80,000 per annum which his father had enjoyed during his life. The descendant of the Mughals, Bahadur Shah, had been informed that his successor

would not be allowed to live at Delhi or to retain the royal title. All this looked like a policy of unjust and high-handed oppression.

Of the chiefs directly affected the Kings of Delhi and Oudh were Muhammadans, who considered themselves the natural rulers of India and likely to profit by the ejection of the British; while the Rani of Jhansi and the Nana Sahib were Mahratta Hindus who had practically conquered the Muhammadans at the time when the British intervened in 1803. The leaders of two of the most warlike races in India, and of the two religions, were thus under the belief that they had met with harsh treatment at the hands of the British; and they determined, if possible, to incite the sepoys, the majority of whom were Brahmans, and most of whom were already in a state of insubordination and discontent.

At this critical moment, with Mughal and Mahratta, Muhammadan and Hindu princes seriously disaffected against the British, with an army of high-caste soldiers alarmed concerning their pay, their privileges, and their religion, and with the British force unduly reduced, there occurred the famous cartridge incident. A new type of rifle having been issued to the sepoys, the unhappy blunder was perpetrated of smearing the cartridge with a composition of the fat of the cow—the sacred animal of the Hindus. On complaints being made, the British officers declared that no cow's fat had been used for the cartridges issued to the men, but this did not satisfy them. The Commander-in-Chief himself (General Anson), however, expressed the opinion that he was not surprised at their alarm at the appearance of the greased cartridges. In these circumstances it was clear that any untoward incident might precipitate a general mutiny.

II. *The Outbreak of the Mutiny*

The first regiment to mutiny was the 34th Bengal Infantry at Barrackpore, near Calcutta, in February 1857, and this was followed in March by the 19th at Berhampur, in the same neighbourhood. Both these regiments were disbanded, and the 84th (British) was brought over from Burma to Barrackpore, but nothing else was done. "Allahabad and Delhi, the two chief fortresses, arsenals, and strategical positions of the North-Western Provinces, were still without the protection of British garrisons, and no steps—such as the collection of supplies and carriage—had been taken anywhere for the prompt movement or mobilisation of British troops" (Macleod Innes). On the 3rd May the 7th Oudh Irregulars mutinied at Lucknow, and were disarmed by Sir Henry Lawrence. Then, on Sunday the 10th, came the great outbreak at Meerut, 42 miles from Delhi. The sepoys, after murdering some of their officers and other

English Miles

100 150 200 250



Europeans, and after liberating some of their comrades who had been imprisoned for insubordination, made off for Delhi. On arriving at that place on the 11th they were joined by the three regiments there, when it was seen that no pursuit from Meerut was to be feared; and after the Arsenal had been captured and many officers murdered and every vestige of British authority destroyed, they declared the King of Delhi to be Emperor of India, while his sons placed themselves at their head.

On the ill-fated 10th of May there were between Calcutta and Meerut only three British regiments—the 14th at Dinapore, the 32nd at Lucknow, and a Company's regiment, the 3rd Europeans, at Agra. Lord Canning, who was at Calcutta, made efforts to obtain reinforcements. The Madras Fusiliers, under Colonel Neill, arrived in Calcutta towards the end of May; the 60th and 70th from Persia early in June; and other British troops from Burma, Ceylon and Singapore, and loyal sepoys from Madras were soon collected. A force which was on its way to China was diverted to Calcutta; and urgent requests for troops were sent to England. But the means of transport for those on the spot were altogether insufficient, especially as the railway from Calcutta only reached Raniganj, a distance of 120 miles. It was not until 7th July, that General Havelock, with an inadequate force of 2000 men, was able to march towards the scene of the disaster.

Nearer at hand was Sir John Lawrence, who was on his way to the hills at Murree. He urged General Anson, who was at Simla, to collect the British and Gurkha regiments which were in the hills and to march on Delhi; but, yet again, transport and commissariat difficulties stood in the way of a speedy advance. Ill-health also dogged the steps of this little force. General Anson died shortly afterwards of cholera, as also did his successor, General Barnard; while General Reed, who took over the command, had himself to surrender it at once, through ill-health, to General Archdale Wilson. Even when this small force of 3800 men reached the famous ridge overlooking the walls of Delhi on the 8th June, after defeating a rebel army of 30,000 men at Badli ki Sarai, it was itself besieged on the ridge by overwhelming numbers.

In the Panjab Sir John Lawrence was ably supported by such men as Chamberlain, Nicholson, Edwardes, and Montgomery; and the local mutinies or threats of mutiny at Peshawar, Naushahra, Multan, Meean Meer, and Ferozepore were energetically suppressed by disarmament, and the important arsenals at Phillaur and Ferozepore were secured. A movable column was formed, under the command, first, of General Chamberlain, and afterwards of General Nicholson, to suppress any further risings in the Panjab, and then

to march on Delhi; the value of the courage and decision of Nicholson can hardly be over-estimated. The Panjab was in a restless condition. With his small force, moving from place to place, disarming or dispersing the mutineers, Nicholson kept mutiny from spreading.

Thus, though there was a lull in the storm for three weeks after the outbreak at Meerut and the capture of Delhi, few effective steps outside the Panjab could be, or at any rate were, taken. The absence of British action gave reason for the general supposition that British power was really at an end. On the 30th May the 71st Bengal Infantry mutinied at Lucknow, and from this date there was a general rising. In some cases British officers, women, and children were all murdered; in others the men alone were killed; but in others they were all spared, and even escorted by the mutineers out of harm's way. As each regiment rose, it made for Delhi, Cawnpore, or Lucknow, which became the centres of the conflict. While Delhi, the historical capital of India, was in the hands of the rebels, Sir Hugh Wheeler, at Cawnpore, with a mere handful of soldiers, was surrounded by overwhelming numbers from the 6th June, and at Lucknow the garrison under Sir Henry Lawrence was closely invested from 2nd July.

III. *The Turn of the Tide*

The outlook was thus indeed gloomy. At Agra the sepoys were disarmed but, although the Maharaja Sindhia of Gwalior was himself loyal, his fine body of troops only awaited an opportunity of marching on Agra. At Cawnpore, Sir Hugh Wheeler's small garrison capitulated on the 26th June, and were massacred next day. At Lucknow, a small British force was holding out against enormous numbers of the enemy. Delhi was in the hands of the rebels.

The first ray of hope came from Delhi itself. Nicholson joined Archdale Wilson on the 14th August, but the siege guns did not arrive from Ferozepore until the 6th September. These opened on the walls on the 11th, and prepared the way for the storming of the city on the 14th and the final capture of Delhi on the 20th. It came not a day too soon. Sir John Lawrence had emptied his province of British troops, sending every possible man to Delhi; and the Sikhs and other Panjabis were becoming uneasy at the idea that the British might not regain their position.

In the meantime, relief was coming, though very slowly, from the direction of Calcutta. "In nine days Havelock and his veterans marched 126 miles under an Indian sun in the hottest season of the year, each man carrying a heavy weight of ammunition, and won

four pitched battles and sundry combats against highly disciplined troops far exceeding them in number." Cawnpore was reached, but too late to save its survivors, who had been murdered by the orders of the Nana Sahib. Havelock's efforts to relieve Lucknow were frustrated for some time by disease and by the lack of effective troops. It was not until the middle of September that Sir James Outram who had been appointed to command the relieving force, arrived in Cawnpore. With great chivalry he forbore to supersede the man who had already made such able and gallant efforts to relieve the beleaguered garrison. After fierce fighting, Lucknow was reached on the evening of the 25th September. General Outram then took command of the old and the new garrisons of the city. Delhi having fallen a short time previously, many of the mutineers then proceeded to Lucknow. Outram therefore found it impossible to fight his way out taking with him the women, children and sick of the old garrison. He therefore remained on the defensive, closely invested, until the final relief of Lucknow two months later. Even then, when Sir Colin Campbell, the newly-appointed Commander-in-Chief, who had just arrived from England, reached Lucknow, he found that the rebels were so numerous that he could, only with great difficulty, escort the women, children and sick from the city. He therefore evacuated the place, leaving Sir James Outram in the Alam Bagh with 4000 men to maintain the appearance of British authority. General Havelock died of dysentery on the 2nd November. On his return to Cawnpore Sir Colin found that the garrison had been defeated by Tantia Topi and had been forced out of the city into his entrenchments on the banks of the Ganges. As soon as the families and sick from Lucknow had been sent in safety at Allahabad, Sir Colin attacked Tantia Topi and dispersed his army. It was not until March of the next year (1858) that Lucknow was finally captured.

IV. *The End of the Struggle*

As the fall of Delhi marked the turn of the tide in favour of the British forces, so did the relief of Lucknow mark the beginning of the end of the struggle; but the end was long in coming. On the 20th Lord Canning issued his Confiscation Proclamation, by which the estates of all the important chiefs in Oudh were escheated. Most of them, although certainly not loyal, had abstained from active participation in the revolt. They now rose, and were joined by other leaders, who believed that they would be similarly treated, and had, therefore, nothing to lose but everything to gain by opposing the British. Thus it happened that, although the sepoy were dispersed, only small bands of them still remaining in the field, new enemies

sprang up, who were not subdued until the end of the year 1858, by which time there were 100,000 British troops in India. Of the various British brigades which operated in different parts of the country, the principal was that under Sir Hugh Rose (afterwards Lord Strathnairn) in Central India. On the 8th January 1858 General Rose left Mhow with a Bombay force, and, marching northwards, captured the fortress of Rahatgarh on the 28th and Garhakota on the 13th February. After several successful battles he arrived before the walls of Jhansi on the 21st March. On the 1st April he totally defeated Tantia Topi, who was marching to the relief of Jhansi with 22,000 men, and stormed and captured Jhansi on the 4th April. The Rani fled with her defeated troops towards Kalpi, where Tantia Topi was collecting another army. General Rose marched out of Jhansi on the 25th April, defeated Tantia Topi on the 6th May, and captured Kalpi on the 23rd. The Rani then fled to Gwalior, where she was joined by the Maharaja's troops, and thus obtained possession of the strong fortress. In spite of the great heat, General Rose marched upon Gwalior, and took it on the 20th June, the Rani, dressed as a man, being killed in one of the actions which took place round the fortress. The Mahratta leader was persistently hunted through Central India and Rajputana during the summer and the ensuing cold weather, and covered 3000 miles in his flight before he was betrayed ten months later, on the 7th April 1859, and was tried and hanged. He had fought against the British gallantly for over a year; but he had also given the signal for the massacre on 27th June 1857, at the Sati Chaura Ghat at Cawnpore. Meanwhile the rebellion in Oudh and the North-West Provinces had been gradually suppressed, and the Nana had been driven into the Nepal jungle, where he is believed to have died of fever. The prophet who had announced that the Company's rule would end in 1857, a hundred years after the Battle of Plassey, was not far out in his reckoning. On the 1st November 1858, at a grand darbar at Allahabad, Lord Canning announced that the Company's possessions in India were transferred to the British Crown.

VII. *The Aftermath*

During the later stages of the mutiny Lord Canning was subjected to much unfair and bitter criticism. His policy of conciliation, though fortified by the advice of men such as Sir John Lawrence and Sir Colin Campbell, was bitterly resented by the European population in Calcutta. On the other hand, Lord Ellenborough, who had just been appointed President of the Board of Control, administered a public rebuke to the Governor-General on account of his Proclamation

to the taluqdars of Oudh. Lord Canning felt deeply these attacks, but in public preserved a dignified silence. He refused to resign "in a time of unexampled difficulty, danger and toil." To his friend, Lord Granville, however, he unbosomed his inmost thoughts in the following words: "I will not govern in anger. Justice, and that as stern, as inflexible as law and might can make it, I will deal out. But I shall never allow an angry and indiscriminating act or word to proceed from the Government of India so long as I am responsible for it." He kept to these principles. To those in Oudh who made a full submission he showed sympathy and generosity. The Canning College at Lucknow is a lasting testimony of the gratitude of the taluqdars of Oudh.

The sad and poignant story of the Mutiny was thus closed, but its indirect results have been very marked in the subsequent development of British rule in India. The Queen's Proclamation of 1858 went far to mitigate the ill-feelings that the Mutiny had aroused. Queen Victoria was especially interested in the preparation of the document, and requested Lord Derby to "bear in mind that it is a female sovereign who speaks to more than a hundred million of eastern people in assuming the direct Government over them and, after a bloody war, giving them pledges which her future reign is to redeem, and explaining the principles of her Government. Such a document should breathe feelings of generosity, benevolence and religious toleration, and point out the privileges which Indians will receive in being placed on an equality with the subjects of the British Crown and the prosperity following in the train of civilisation."

MODERN CONDITIONS

Since the Mutiny there has been a great change in British policy. All Rulers of States are now in practice allowed to adopt heirs to their sovereignty as well as to their property. Widows are allowed to adopt: the Government never annexes on failure of natural heirs. Modern preparations for transport, commissariat, and mobilisation, combined with the railway system and telegraphs (including wireless telegraphy), ensure the speedy movement of troops to any given spot. The high-caste sepoy has been to a considerable extent replaced by a less exacting soldier, and the danger of a groundless religious panic thereby lessened, while the pay of the sepoy has been raised, whether on service in his own country or in foreign districts.

The right of the East India Company to maintain a standing army in India is now possessed by the Crown. The purposes of the army in India are twofold; the defence of India against external aggression and the maintenance of internal order. A step towards

the Indianisation of the Indian Army is being made : by gradual substitution of Indian Officers with King's Commissions for British Officers in eight selected regiments, and by the training at Dehra Dun and Sandhurst of young Indians for a military career.

In February 1926, the establishment of the Royal Indian Navy, with Commissions open to Indian gentlemen, was announced. The Royal Indian Marine is to be reconstructed as a combatant force with responsibilities in the Indian Ocean and the Persian Gulf.

GLOSSARY OF THE PRINCIPAL VERNACULAR TERMS USED IN THIS BOOK.¹

[A. signifies Arabic; H. Hindūstānī or Hindī; K. Kanarese; Mal. Malayālam; M. Mahrāṭṭi; My. Malay; P. Persian; S. Sanskrit; Sin. Sinhalese; Tel. Telugu; Tur. Turkish; T. Tamil.]

AMÍR (Ameer), A. "commander," a title of Princes and nobles, as the Amírs of Sind, and formerly of Afghanistan.

ÁNÁ (Anna), H. the 16th part of a rupee.

ANIKUT, T. weir, dam (*annai kutta*).

ANJUMAN, P. assemblage, society, institute.

ĀRĀMA, S. and Sin., a pleasure-garden or park.

BABÚL, H. a thorny mimosa (the *Acacia arabica* tree), in N. India named the Kikar.

BAHÁDUR, P. "brave," "chivalric," a title of honour among Muhammadans.

BANA, Sin. reading of the sacred books in public.

BAND (correctly, bándh) H. an embankment or dyke—commonly Bund.

BANDAR, P. a port or harbour.

BANYAN-TREE, the Indian Fig-tree (*Ficus Indica*, or *Ficus Bengalensis*, L.) which has aerial roots.

BÁOLÍ, H. a well with steps, galleries, and chambers.

BARADARÍ, H. (twelve doors), a summer house; a mansion.

BÁZÁR, P. a market or market-place; a street of shops.

BEGAM (Begum), Tur. a lady of rank; a Queen or Princess.

BEL, H. a fruit-tree (*Egle marmelos*).

BHATTÁ (Bhátá or Batta), H. additional allowance given to public servants on special duty or on duty at a distance from headquarters.

BUNGALOW, H. (bangalá), a thatched or tiled house of one storey with verandahs; the name usually applied to the houses of the English in India.

CASTE, class; sect; corruption of the Portuguese *casta* or race.

CATAMAKAN, T. *kattu*, "to bind," *maram*, "a tree," a log-raft on which the natives of Madras paddle through the surf.

CHABÚTRÁ, H. a raised platform, usually of stone or brick; terrace.

CHADAR, H. (Chádar) sheet worn by men and women.

CHAITYA, S. a Buddhist chapel or church; primarily a heap or tumulus; also a place of sacrifice or religious worship; any building of the nature of a religious monument (Fergusson, *Ind. Arch.*).

CHAKRA, S. a wheel; the wheel of the law.

CHAUKIDAR (Chokidar), H. a watchman.

CHAURÍ, H. a fly-whisk; a mark of rank.

¹ Terms relating to religious matters, festivals, etc., which are explained in the Introduction, are generally not included here.

- CHÁWADI, Tel. a native rest-house for travellers, English corruption *Choultry*.
- CHHATTRÍ, H. (Chhattar) umbrella; insignia of rank; a monumental structure or pavilion erected in honour of a person of rank.
- CHÍTAL, H. the spotted deer (*Axis maculatus*), gregarious, and common in many parts of India.
- CHUNAM, T. an English corruption of H. *chúndá*, lime, a plaster or mortar sometimes made of powdered shells of a remarkable whiteness and brilliance.
- CHAR, an alluvial formation, as an island in, or on the bank of, a river.
- COMPOUND, an enclosure, probably a corruption of the Malay word *Kampong*.
- CRORE (Karor), H. 100 lakhs or 10 millions.
- DAGOBA, a Sinhalese word from Pali *dhatugabbha* and S. *dhatugarbha* = relic-receptacle; strictly applicable to the dome of the *stupa* (q.v.) (Fergusson).
- DÁK, H. Post. Dak-Bungalow (or Musáfari Bungalow), a rest-house for travellers.
- DÁKGÁRI, H. stage-coach, drawn by ponies, for one or two travellers.
- DARBÁR (Durbar), P. a royal court; an audience or levee; a hall.
- DARGÁH, shrine; place of burial of a Muhammadan saint.
- DARWÁZA, P. gateway, door.
- DEODÁR, the *Cedrus deodara* of the Himalaya: from *deva-daru*, the "wood of the gods."
- DHARMSÁLÁ, H. and M. (*dharma*, "justice," "piety," and *sáld*, "a hall"), a place of accommodation for travellers and pilgrims.
- DHARNA, S. to sit at a door until payment is extorted (an offence under the Penal Code).
- DHOLI, H. *Dhooli* (properly *dolí*), a swinging cot or litter suspended from a pole carried by bearers.
- DÍWÁN, P. "a royal court," "a minister," especially the chief financial minister.
- DÍWÁN-I-AM, DÍWÁN-I-KHÁS, P. hall of public, private, audience.
- DOÁB, the country between two rivers.
- DWÁRPÁL, H. a door-keeper, commonly sculptured at sides of doors in Buddhist shrines and Hindu temples.
- FAKÍR, A. a religious Muhammadan who has taken a vow of poverty; a poor man; also inaccurately applied to Hindu devotees and ascetics.
- FARMÁN, P. a royal order or grant.
- GADDÍ, H. seat; royal seat; throne of a Hindu Prince.
- GALA, Sin. (giri, S.), hill, rock.
- GAMA, Sin. (grama, S.), village.
- GARUDA, a fabulous bird; the vehicle of Vishnu.
- GHARÁ, H. an earthen water-pot or jar.
- GHÁT (Ghaut), S. *ghatta*, "a landing-place," "steps on a river-side"; a mountain pass; any narrow passage.
- GIRJA (Port), church: from Portug. *igreja*.
- GOPURAM, H. the gate-pyramid of a pagoda; the principal feature of the quadrangular enclosure of a temple.
- GOSAIN, H. Hindu monk or devotee.
- GUMBÁZ, P. a cupola; a dome.
- HAMMÁL, A. a bearer of a *palkí*; in Bombay, an orderly or house-bearer.
- HAMMAM, P. bath.
- HARÍM (harem), P. a sanctuary; ladies' apartments.
- HAUZ, A. cistern, tank, reservoir.
- HAVILDÁR, H. "one holding an office of trust"; an officer in native regiments corresponding to a sergeant.
- HUKKA (Hooka), A. a native pipe.

- HUZÚR**, A. the royal presence ; a respectful term applied to high officials.
IDGÁH, P. the open enclosure where the Id prayers are offered.
IMÁMBÁRA, P. a building to which the Shias carry the *tazias* or biers in the *muharram*, often the tomb of the founder.
ISHWAR or **ISWAR**, S. God, Lord.
JÁGÍR, P. a tenure by which the public revenues of an estate or district were granted to an individual (*jagirdar*), with powers to collect them, and formerly to administer the general affairs of the estate.
JAM'ADÁR, A. a native officer next to a *Súbadar*, and corresponding to lieutenant.
JHATKA, H. covered pony cart in S. India.
JHÍL, H. pool, lake, swamp.
JOGI, S. a Hindu devotee, as *Fakir* is a Muhammadan.
JOHAR (*Jauhar*), H. sacrifice or immolation practised by Rajputs when about to be captured. Scholars will recall the occurrence of such sacrifices at *Saguntum* and *Numantia*.
KABR, A. a tomb.
KACHAHRÍ, H., commonly *Cutcherry*, a court or office for public business.
KALIMA, A. (in full, *Kalimat-ul-shahadat*, the word of testimony) the Muhammadan declaration of faith (*Introduction*, p. li).
KANDA, Sin. mountain.
KANKAR, H. nodular limestone, with which roads in N. India are often metalled.
KARBALA, A. designation of cemetery or place where *tazias* are buried, derived from the city on the Euphrates where *Husain*, son of *Ali*, the 4th Imam, is buried.
KHÁN, A. a Muhammadan title of respectability answering to "Esquire."
KHÁNSÁMÁ, P. literally "master of the household gear" = butler, or house-steward. In Upper India it is the title of the chief table-servant and provider, always a Muhammadan. In N. India and Kashmir, it means the cook. In the Madras Presidency and S. India, this title is not used ; "butler" is general, and he is seldom a Muhammadan.
KHIDMATGÁR, A., P., the "service-doer," always applied to a Muhammadan table-servant.
KIBLA, A. the place to which Muhammadans look when praying, *i.e.* in the direction of the *Ka'ba* at Mecca.
KIL'A, **KILADAR**, P. fort, commandant of fort.
KIMKHWÁB (*Kincob*), P., H. gold brocade.
KOTHÍ, H. residence, house, mansion.
KOTWÁL, **KOTWÁLÍ**, P. police officer, police station.
KULAM, T. tank.
KULÍ (*Cooley*), T. and Tur. a day labourer ; porter at railway stations and elsewhere.
KUND, S. a pit, hollow, pool, well, small tank.
LÁKH (*Lac*), S. the number 100,000. By customary use "a lakh" means "a lakh of *rupees*" (= £7500 at Rs. 13 to the £).
LÁT, H. a stone monolithic pillar = *stambha*, common to all styles of Indian architecture.
LINGAM, S. (*Linga*) symbol of *Siva* as the God of reproduction ; phallus.
MAIDÁN, P. plain, open space, field of battle.
MAKBARA (P. from *Kabr*), grave of a saint.
MAMLATDÁR, subordinate revenue collector in Bombay.
MAN (*Maund*), H. a weight, varying in different parts of India. In Bombay it is 25 lb. ; in Bengal, since 1883, 82 lb.
MANDAPAM, S. an open pavilion or porch in front of a temple ; also *Mantapam*.

- MASJID**, A. mosque (place of prostration, *sijda*). Jāmi Masjid, congregational mosque.
- MASNAD**, P. cushion, throne of a Muhammadan Prince.
- MASULA**, T. a boat sewed together, used for crossing the surf at Madras.
- MATH**, H. Hindu monastery, of which a Mahanth is Abbot.
- MELÁ**, H. a fair.
- MIHRÁB**, A. an arch; the recess in the wall of a mosque on the side nearest Mecca, to which Muhammadans turn at prayer—usually termed Kibla in India.
- MIMBAR**, A. the pulpit in a mosque; the preacher stands on the middle step of the three while delivering his sermon (Khutba).
- MONSOON**, A. a corruption of the A. *mausim*, “a season”; applied now to the seasonal rains in India during the S.W. Monsoon, from June to September.
- MUFASSAL** (often written Mofussil), separate, detailed, particular: commonly meaning “the interior of the country,” as distinguished from the towns.
- MUNSHÍ** (Moonshi), A. a writer; a secretary; a teacher of languages.
- NÁIK**, S. an officer in native armies corresponding to a corporal; an ancient title.
- NANDI**, S. bull; vehicle of Siva, often carved in kneeling attitude facing Saivite temples.
- NAUBAT KHÁNA**, **NAKKÁR KHÁNA**, A. the chamber over a gateway, where a band is stationed for ceremonial music.
- NÁUTCH** (Nach), S. a dance; an exhibition of dancing-girls.
- NAWÁB** (for nuwwāb), A. this word means *lit.* “deputies,” being the plural of *naʿīb*, “a deputy.” It is now a title of Governors and other high officials.
- NIZÁM**, A. *lit.* arrangement; an administrator; a title of the Prince whose capital is Hyderabad, in the Deccan.
- NULLA**, H. properly Nálá, “water-course,” or “depression.”
- PAGODA** (origin obscure), “an idol temple” in S. India; also a coin formerly in use = $3\frac{1}{2}$ rupees, called by Indians *hán*, but deriving the former name from its showing a temple on one face.
- PALANKEEN** (PALANQUIN), H. an Anglican corruption of the word *pálkī*, a means of conveyance, of the shape of a long box with sliding sides, in which persons are carried on men’s shoulders.
- PÁLEGÁR** (Polygar), T. Tel. a shareholder; a landed proprietor. A title of persons in the Madras Presidency who correspond to zamindars in other parts of India.
- PÁN**, S. the leaf of the betel creeper. Pan-supari is areca nut rolled in betel leaf with a little shell-lime for chewing.
- PANSALA**, Sin. a leaf-hut; monk’s dwelling.
- PARDA**, P., H. a curtain, especially one that screens women; *pardanashin* = one sitting behind a curtain—*s.e.*, secluded.
- PATEL**, S. the headman of a village, invested with some magisterial and revenue functions.
- PREPUL** (Pípal) S., H. one of the great fig-trees of India (*Ficus religiosa*).
- PEON**, from the Portuguese *peao*, Spanish *peon*, “footman.”
- PESHWÁ**, P. the Brahman Prime Ministers of the Rájás of Sátará, who afterwards became the supreme Chiefs of the Mahrátta nation.
- PHINS**, T. the Toda name for the stone circles on the Níliri Hills.
- PICE**, H. a corruption of the word *paísá*, a copper coin, of which 64 go to a rupee, and 4 to the anna, and which itself contains 3 pie.
- PILIMAGE**, Sin. image-house.
- PINDÁRI**, M. (Pendhara), organised bodies of raiders and robbers.

- PINJRAPOL, H. (*pinjra*, a cage), an animal hospital, mostly kept up by the Jains; animal infirmary.
- PINKAMA, Sin. merit-act; entertainment.
- PÍR, P. old; a Muhammadan saint.
- PIRIVEN, Sin. series of monks' cells.
- PRÁKÁRA, a great corridor between a temple and the surrounding wall.
- PURA, S. and Sin. (PURAM, T.), a town, or city.
- RÁJÁ, S. a Hindu King or Prince.
- RANÍ, S. the wife of a Rájá; a Queen or Princess.
- RATH, S. a chariot formerly, now refers to car used by Hindus on ceremonial occasions.
- RATHS or RÁTHAS, the name of certain rock-cut monolithic Dravidian temples at Mamallapuram, near Madras.
- RISÁLDÁR, A. a native captain of a troop of horse.
- ROZA (Rauza), A. a tomb in an enclosure, originally the garden at Medina adjoining the chamber (hujra) in which Muhammad was buried.
- RYOT, A. a corruption of the A. word *ra'iyyat*, a subject, a peasant.
- ŠADR, A. (Sadar, Sudder), top, chief, principal.
- ŠADR 'ADÁLAT, A. formerly the Supreme Court of Justice in India.
- ŠÁHIB, A. lord; a title applied to an English gentleman in India.
- ŠAIYID, A. a descendant from the daughter of Muhammad.
- SAMÁDH, H. cenotaph of a Hindu; also self-immolation.
- SANDAL, A. and S. the fragrant wood of the *Santalum album*, L.
- SANGAM, S. junction of two or more rivers—commonly a sacred place of pilgrimage.
- SANGHÁRAMA, a group of apartments for a community of monks, a monastery.
- SARÁÍ, P. a rest-house for travellers; a caravanserai.
- SÁRÍ, H., a sheet worn by Hindu women.
- SATÍ (Suttee), S. a chaste wife, especially one burnt with her deceased husband; the burning of such a wife.
- SHÁH, P. a King; a title usually applied to the King of Persia.
- SHAIKH, A. old, respected; a class or rank of Muhammadans.
- SHANKH, S. a conch shell, large specimens of which are blown as horns by the Hindús during religious ceremonies.
- SHIKÁR; SHIKÁRÍ, P. game, shooting; Indian gamekeeper.
- SHOLA, T. a patch of jungle; a wooded dell.
- SIKRA, S. (Sikhara) spire or finial of Hindu temple; pyramidal; many-storeyed; always surmounting the cell of the image.
- SINHÁSAN, S. a lion-seat (*singh*, lion), Hindu throne.
- SIPÁHÍ, H. (Sepoy), an Indian soldier, one of a *sipáh* or army.
- STAMBHA = LĀT (*q. v.*).
- STUPA (or TOPE), a relic-shrine; a monument containing relics; or a tower commemorative of an event or sacred spot (Fergusson).
- ŠÚBADÁR, A. Governor of a Province; an Indian infantry officer corresponding to a captain.
- TAHSÍL, P. a division of a Zilla, equivalent to Taluk.
- TAHSÍLDÁR, P. a native sub-collector of revenue, who may also be a magistrate.
- TAIKHANA (P. *tah-khana*, lower house), underground room for retreat in summer, P. *sardáb*.
- TĀJ, P. a crown.
- TALE, Sin. a tank.
- T'ALUK, A. or more properly *ta'alluk*, a tract, or division of a district.
- TANK, a reservoir, an artificial pond or lake, made by excavation or by damming (a word of both Indian and European origin).
- TAPPÁL, H. in Bombay the post; and Madras; a relay of horses.

- TÍRTHA, S. a ford; a bathing place, especially one to which religious pilgrimages are made.
- TATTÍ, M. matting; a mat-shade.
- TEPPA KULAM (*South India*), a tank surrounded by steps with usually a temple in the centre.
- THÁNÁ, a police-station; THÁNADÁR, the officer in charge of it.
- TIFFIN, luncheon, a word of hybrid and uncertain origin.
- TIRTHÁNKÁR, S. Jain saint.
- TONGÁ, H. a light, small, and low-seated two-wheeled vehicle drawn by ponies, often used to the hill-stations and in them.
- TRIMURTI, the three-faced bust of Siva in the characters of the Hindu Trinity.
- TRIPULIA, H. a gateway, or approach with three arches.
- TUGHRÁ, A. an ornamental character of writing, used for royal signatures and titles.
- TULSI, S. the *Ocimum sanctum*, the sacred Basil plant, venerated by the Hindus.
- VÁHANA, S. the vehicle of a Hindu god.
- VIHÁRA, S. a Buddhist monastery, or an apartment or hall in a monastery or cave: in Ceylon, a Buddhist temple; a meeting-hall of monks; later temples, and resembling churches (Fergusson).
- VILA, Sin. (VILEI, T.), a pond.
- VIMÁNA, S. the principal part, the actual temple itself; has a pyramidal roof, and contains the cell for the image or emblem of the god.
- WAPI or VAPI, S. and Pali, a tank.
- WAZÍR, A. a prime minister.
- WEWA, Sin. a tank.
- ZAMÍNDÁR, P. a landed proprietor, a landlord.
- ZANANA, P. women's quarters—commonly Zenana.
- ZIÁRAT, A. pilgrimage, and hence a burial-place, a place of Muhammadan pilgrimage.
- ZIL'Á (Zilla), A. a portion, division, or district; hence, the area or tract constituting the jurisdiction of the District Officer—*i.e.*, a Magistrate and Collector, or a Deputy Commissioner.

PRONUNCIATION OF INDIAN WORDS.

Consonants are pronounced as in English. *Ch* should be sounded as in "church," and *dh* and *th* as in "woodhouse" and "boathook." In the Bombay Presidency *ç* as written is in certain circumstances pronounced almost like *r*; *e.g.* Madmad (Manmar)l Anhilwaḍa (Anhilwara), Mahanwaḍa (Mahanwara), and such proper names as (Ghorpade Ghorpuré).

Vowels are ordinarily pronounced as in Italian; thus, *pul*, *Mir*, *Mūl* and *nou* have their English equivalents in "bull," "peer," "pool," and "now." *Āi* has the vowel sound as in "mine," *ou* (Oudh) as in "proud." A long *ā* is pronounced as in "father," *e.g.*, Rām, Māhārājā; and a short *a* like *u* in "but," *e.g.*, Akbar (Ukbar), parda (purda). The accent is distributed almost equally on each syllable.

For the pronunciation of Burmese names, see pp. 695-696.

ETYMOLOGY OF SOME PLACE-NAMES IN INDIA.

Meaning of some of the more common component parts of place-names, other than those mentioned in the Glossary, p. cxlviii. For some Burma place-names, see p. 695-6; and for certain Ceylon place-names, see p. 735-6.

For references to languages, see p. cxlviii.

- ÁBÁD, P. peopled.
 ÁSRAMA, S. hermitage.
 ACHALAM, T. hill.
 ARU, T. river.
 BÁGH, BAGHÍCHA, P. garden.
 BANI, Sindi, field.
 BÁRÍ, BÁTÍ, H. house.
 CHERUVA, Tel. tank.
 COTE, COTTA, COTTE, COTTAH.
 See KOT.
 DIGHÍ, H. tank.
 DHÁRO, Sindi, river.
 DIH, P. village.
 DONGAR, M. hill.
 DRUG, DURGA, T., Tel. fort.
 ERI, T. tank.
 GANJ, H. mart.
 GÁCHÍ, H. grove.
 GARH, H. fort.
 GHAR, H. house, habitation.
 GIRI, S. hill.
 GÓTH, Sindi, village.
 GRÁM, GRÁMAM, GÁON, H. village.
 GUDDI, K. hill.
 GUHÁ, S. cave.
 GUNTA, Tel. tank.
 HÁT, H. market.
 HOLE, K. field.
 ÍSVARA, S. lord.
 KADU, T. forest.
 KERE, K. tank.
 KHÁL, H. channel.
 KHAND, S. portion.
 KHAND, M. pass.
 KHET, H. (KSHETRA, S.) field.
 KHET, S. small town.
 KILO, Sindi, fort.
 KOVIL, T. temple.
 KOT (S.), KOTA (Tel.), KOTTAI (T.),
 KOTTE (K.), fort.
 KUPPAM, T. hamlet.
 MAHÁI, H. (from Ar. mahall),
 quarter.
 MALAI, T. hill or range.
 MANDALAM, T. tract of country.
 MANE, K. habitation.
 MANGALAM, S. happiness.
 NÁD, T. tract of country.
 NADÍ, H. river.
 NAGAR (S.), NAGARAM, town.
 PAHÁR, H., PAHÁD, Sindi, hill.
 PALAIYAM, T., PALEM, Tel. petty
 kingdom.
 PALLI, T., PALLE, Tel. village.
 PÁRÁ, PÁRÍ, H. quarter of a town.
 PATI, S. lord.
 PATÁM, PATAN, PATANA, PATNA,
 PATTANAM, S. etc., town or city.
 PET, PETA, Tel., PETTAI, T. quarter
 of a town.
 RAI, M. grove.
 SHAHAR, P. city.
 SOT, H. spring or stream.
 STHÁNA, S., STHAN, STHAI,
 STHALI, THÁN, TÁN, place.
 TALÁO, P. pond.
 TOTA, Tel., TOTTA, T. garden.
 UR, T., URU, Tel. village.
 VARAM, T. village.
 VANA, Tel., VANAM, T. grove.

I.—BOMBAY AND THE ENVIRONS *

[For Directory, including list of Hotels, etc., see Index.]

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History¹.—There is little doubt that the W. coast of India had trade relations with the Assyrian, Persian, and Roman empires; but the direct connection of modern Europe with it dates only from 1498, when Vasco da Gama sailed round the Cape of Good Hope to Calicut. Twelve years afterwards Albuquerque conquered Goa, and twenty-four years later again Sultan Bahadur Shah, of Gujarat, ceded Bassein, Salsette, and Bombay to the Portuguese. In 1608

Captain William Hawkins, of the Third Separate Voyage, landed at Surat, and in 1611-12 a permanent factory was established there. In 1626 the Portuguese buildings in Bombay were captured and destroyed by a combined English and Dutch force. In 1661 Bombay was ceded to England as part of the dowry of Catherine of Braganza, but owing to disputes with the Portuguese Governor, the actual possession of it was not transferred till 1665, and on the 23rd September 1668 it was made over to the East India Company by King Charles II. to be held at an annual rent of £10 in gold "as of the manor of East Greenwich, in the county of Kent, in free and common soccage." One of the terms of the transfer was that the English should support the Portuguese in India against the Dutch, who were

¹ Selected literature regarding Bombay:—*Bombay City Gazetteer*, by S. M. Edwardes (3 vols. 1910); *Bombay and Western India*, by J. Douglas (Sampson Low, 1893); *Bombay in the Making*, by P. B. M. Malabari (Unwin, 1910); *Rise of Bombay*, by S. M. Edwardes (Bombay, 1902); *By-ways of Bombay*, by S. M. Edwardes (Bombay, 1912); *Glimpses of Old Bombay*, by J. Douglas (Sampson Low, 1900); *The Charm of Bombay*, by R. P. Karkaria (Bombay). For up-to-date statistics the "Times of India" Year Book should be consulted.

rapidly supplanting them everywhere. The name of the place was then supposed to be a corruption of the Portuguese Bom Bahia or Fair Bay. But the vernacular name is *Mumbai*, and this suggests that it was originally called after the Koli goddess Mumbai, or Mumbabai, who still has an important temple and tank in the heart of the Indian quarter (p. 22). She is a form of Amba Bhawani, or Parvati, the consort of Siva.

At the time of the transfer from the Portuguese, Bombay was a wretched place. It consisted of seven islands, separated at high tide by the sea which, at low tide, left a wilderness of malarious mud-flats. Dense coco-nut plantations covered it, and the inhabitants were chiefly fishermen and toddy-drawers; respectable Hindus and Parsis shunned it on account of Portuguese intolerance. Its unhealthiness was notorious: 17th-century travellers speak of it as "a charnel-house" and mention a contemporary proverb, "two monsoons are the life of a man." The gradual transformation in drainage and reclamation of this pestilential swamp into the great city of to-day, which proudly styles itself *Urbs prima in Indis*, has been the work of many hands. But the chief credit is due to Gerald Aungier, the real founder of Bombay, who, by his policy of toleration, induced the Parsis, Banias, and other mercantile communities to settle under the protection of the British flag. The Parsis first came to Bombay in 1670.

In 1674 Bombay possessed a castle which mounted 120 pieces of various ordnance, and had a garrison of 300 English, 400 Portuguese, and 500 militia. In 1687 the seat of Government was finally transferred from Surat to Bombay. The first four Governors held Bombay for the Crown. After the transfer to the East India Company, for the next nineteen years (1668-87), except for occa-

sional visits and during three years (1672-75) of the rule of Gerald Aungier, the Governors of Bombay spent almost the whole of their time at Surat, of which factory they were Presidents. During their time Bombay was administered by an officer styled Deputy-Governor; this title fell into disuse between 1720 and 1738. In 1708 it became the real trading headquarters of the Company on the W. coast, Surat being no longer a safe place; and before 1720 the town, which had grown up outside the castle, contained a population of 50,000, and was enclosed by a wall. At that time it already possessed a mint; a bank was founded shortly afterwards, and the port flourished considerably from the encouragement given to the China trade. About the middle of the century the town was re fortified, and soon came into prominence in connection with the suppression, in 1756, of the pirates by Admiral Watson and Colonel Clive, a position which was ultimately confirmed by the results of the struggle of the Company with the Mahrattas, who, twenty years before, had taken Bassein and Salsette from the Portuguese. On the Portuguese preparing to recover Salsette in 1774, it was seized by the Company, and, with Broach, was retained after the Peace of 1776; and though both were surrendered by the disgraceful Convention of Wargaon (1779), the fulfilment of that was saved by the arrival of Colonel Goddard with the Bengal troops and, after Bassein had been captured in 1781, the whole of these acquisitions remained with the British by the Treaty of Salbai in 1782. From that time the development of the port and city has proceeded steadily apace. The city was visited by General Wellesley (the Duke of Wellington) in 1804, and to his instance was due the first road practicable for

artillery up the Bhore Ghat and to Poona; and it seems certain that it must have been visited by Lord Nelson while a midshipman, in 1775, as the *Seahorse*, on which he made his first cruise, was in the Persian Gulf and at Bombay in that year.¹ The framework of the present system of administration of the Presidency and its Capital was shaped by Mountstuart Elphinstone in 1819-27. The Chamber of Commerce was established in 1836, the Bishopric in 1835, and the Bombay Bank (which is now merged in the Imperial Bank of India) in 1840; the University was created in 1857, and the Legislative Council in 1862; the Municipal Authority, formed in 1872, was converted into a Corporation in 1888. The Port Trust was constituted in 1873, and the Bombay City Improvement Trust in 1898. The mail service with England was undertaken by the P. & O. Company in 1855; the G.I.P. Railway, which had been opened as far as Thana two years previously, was extended up the Ghats in 1863, and in the same year the Bombay Baroda and Central India Railway, which had been opened in 1860, was extended to Ahmadabad.

The four most remarkable developments in Bombay during the last half of the 19th century have been (1) the reclamation of land; (2) the construction of docks (p. 20); (3) the development of cotton mills (the first founded in 1857), of which there are now in Bombay 83, employing 180,000 hands; and (4) the erection of a splendid series of public buildings, many due, as will be seen below, to the

munificent charity of private persons. The constructive stage may be said to have begun during the Governorship of Sir Bartle Frere (1862-67), when the American Civil War poured immense wealth into Bombay in connection with the export of cotton, and over-speculation was followed by a severe financial collapse. It was at this date that the old fort walls were at last removed. The castle which guarded the centre of its sea front yet stands, and Fort George, which stood at the Northern end of this front, still gives its name to the European General Hospital. On the S. side the defences followed the line of Rampart Row from the Apollo Gate to the S.W. corner, and then that of Esplanade Road, passing the Church Gate and Hornby Road, to the N.W. corner and the Bazar Gate, whence they turned E. to Fort George. Outside the W. defences was a fine esplanade, and in the centre of the fort was the green on the site of which Elphinstone Circle now stands. Modern progress is associated with the activities of the Corporation, the City Improvement Trust, and the Development Directorate. As in the case of New York, the area for expansion is limited, and the provision of accommodation for a growing population presents a constant and insistent problem. The population has risen from 150,000 at the beginning of the 19th century to 776,006 in 1901, and from 979,445 in 1911 to 1,175,914 at the latest census of 1921. It was then classified as follows:—

Hindus	837,600
Muhammadans	184,685
Parsis	52,234
Jains	23,884
Europeans	14,726
Anglo-Indians	4,724
Indian Christians	48,719
Jews	7,548

¹ In Lord Nelson's original letter of thanks to the East India Company for the gift of £10,000 voted to him after the Battle of the Nile (dated 3rd July 1797, and written on board the *Foudroyant* at Naples), he says, "Having in my younger days served in the East Indies, I am no stranger to the munificence of the Honble. Company." This letter may be seen in the Library of the India Office. It is reproduced in Douglas's *Bombay and W. India*.

The Corporation consists of a hundred and six members, seventy-

six elected from different wards of the city, four elected by the Chamber of Commerce, the Indian Merchants Chamber and Bureau, the Mill-owners' Association and the University, sixteen nominated by Government, and ten co-opted by the elected and nominated members. Inside the Corporation, which is a deliberative body, are two statutory committees: (1) the Standing Committee consisting of sixteen members, twelve elected by the Corporation and four nominated by Government, which is practically the Finance Committee of the Corporation, and (2) the Schools Committee consisting of sixteen members, twelve elected by the Corporation from its own body and four, of whom two must be women, from outside. The Municipal Commissioner appointed by Government exercises supreme executive authority in all municipal matters excepting primary education, in respect of which the entire executive authority is vested in the Schools Committee. The annual income of the Municipality (Budget figures for 1926-27) amounts to 321 lakhs, derived principally from a general tax (127 lakhs), a water tax (73 lakhs), a conservancy tax (32 lakhs) and town duties (33 lakhs).

The cotton mills, which next to the overseas trade at the docks employ the major portion of the population, are, with one or two exceptions, situated in Parel, at the N. end of the city.

The City Improvement Trust was created by a special Statute in 1898 for the purpose of improving the sanitation of the city and developing new residential areas. The capital expended by the Trust on the acquisition and development of their estates has now reached nearly 9 millions sterling. The estates aggregate about 2507 acres, including 829 acres fully developed as residential

areas, of which about 500 acres have been disposed of on building leases for 99, or 999 years. Accommodation has been provided for 37,000 persons. The magnitude of the operations of the Trust can be gathered from the latest figures. In 1927-28 the net revenue was Rs.80,53,712, of which the Corporation contributed Rs.23,11,630. Miscellaneous receipts totalled Rs.8,65,068, and Rs.48,77,614 were received from the estates. The expenditure was Rs.1,03,74,640, and included interest on loans Rs.83,87,486, sinking fund Rs.6,29,960, and expenditure on estates Rs.13,57,194. The work of the Trust is now carried on by a Chairman and Board under the control of the Corporation.

The Development Directorate was created by the Government of Bombay in 1920, with the object of providing for the development of the City of Bombay and of relieving the congestion and overcrowding which prevail in the city. The programme of works which it is proposed ultimately to carry out is as follows: (a) The provision of 50,000 one-roomed tenements for the working classes; (b) reclamation of 1145 acres in Back Bay and of 132 acres in the harbour, on the west and east of Colaba Point; (c) the development of South Salsette, the larger island, which intervenes between Bombay and the mainland, partly for residential and partly for industrial purposes; (d) the provision of other industrial areas at greater distances; (e) the improvement of communications to the suburban areas; and (f) the improvement of the supply and transport of building materials. The "Back Bay Scheme" has, unfortunately, not proved a complete success. Unforeseen engineering difficulties arose as the work progressed, and the high prices which prevailed after the war materially upset calculations. After an enquiry in March 1926

it was decided to proceed for the present only with three blocks of the Reclamation Scheme at the Northern and Southern extremities of the area concerned. To the end of 1925, the expenditure on the Reclamation Scheme was 390 lakhs.

The adoption of these great proposals for the improvement of the material conditions of the City of Bombay was mainly due to the energy of Sir George (now Lord) Lloyd, when Governor of Bombay. Industrial and residential colonies have been established outside Bombay and houses and factories are springing up in them.

The Governors of Bombay have been, during recent years: Lord Sydenham (1907-1913), Lord Willingdon (1913-1919), Sir George Lloyd (1919-1923); and Sir Leslie Wilson (1923-1928). The present Governor, H.E. Sir Frederick Sykes, G.C.I.E., G.B.E., K.C.B., C.M.G., assumed office in December 1928.

The Island of Bombay is situated in lat. $18^{\circ} 53' 45''$, long. $72^{\circ} 52'$. Now actually a peninsula, it was originally one of a group of twelve islands which were at one time separated from the mainland and from one another by very narrow channels, some of which have now been filled up, the principal being Bassein, Dharavi (Dravi), Salsette, Trombay (in which the hill called the Neat's Tongue, 1000 ft. high, is a conspicuous mark), Bombay, and Elephanta.

The Southernmost of these islands was Colaba (p. 14), so-called from the Koli fishermen who inhabited it. On the W. extremity, between Colaba on the S. and the bold and striking promontory of Malabar Hill or Walkeshwar (p. 24), now the fashionable residential quarter, on the N., lies the shallow basin, about 3 m. broad, known as Back

Bay. On the E. side, between the island and the mainland, is Bombay Harbour, a fine expanse of water, 5 to 9 m. broad. In the narrow neck between Back Bay and the Harbour, is the old site of Fort George, the nucleus of the city. Further N. are the bazars and mill quarters; beyond these again the suburbs which are being opened up (p. 27).

Bombay Island is $11\frac{1}{2}$ m. long from the S. extremity of Colaba to Sion Causeway, over which the G.I.P. Railway passes to the island of Salsette, and from 3 to 4 m. broad in that portion which lies to the N. of the Esplanade. The area is 22.48 sq. m.

Climate.—The average temperature of Bombay is 79.2° F. It is neither so hot in summer nor so cold in winter as many places in the interior. The coolest months are from November to April, when there is always a refreshing sea-breeze. The periods just before and after the S.W. monsoon (May to June and October) are disagreeably hot and humid, and the torrential rains of July, August and September are inconvenient for sight-seeing; the traveller is advised to avoid a visit to Bombay at this season of the year. Malabar Hill is usually several degrees cooler than the Fort, and healthier. The average rainfall is 70.30 in.

Bombay Harbour.—The panorama which confronts the traveller, as he enters Bombay from the sea, is singularly beautiful, and has been compared, not unjustly, to the Bay of Naples. On approaching the harbour the scene is very picturesque. To the W. the shore is crowded with buildings, some of them, as the Colaba Church, the Tower of the University, and that of the Municipal Buildings, very lofty and well proportioned. To the N. and E. are numerous islands, and on the mainland hills rising

to an altitude of from 1000 to 2000 ft. Pre-eminent amongst these is the remarkable hill of Bawa Malang, otherwise called Mallan-garh, on the top of which is an enormous mass of rock with perpendicular sides, crowded with a fort, now in ruins. (See p. 522.)

The main defences of the harbour, remodelled and armed with the newest and heaviest guns, consist of batteries on the islands in the harbour, in addition to which there are three large batteries on the coast. (The South Island fort is called the *Oyster Rock*; that on the *Middle Ground* shoal is in the middle of the anchorage; the third defence is on *Cross Island*, at the N. end of the anchorage, the higher part of which has been cut down and armed with a battery. The forts on the coast are at Sewri, Warli, and Mahim; and there is a battery at Colaba Point.)

Landing.—The mail steamers lie alongside the landing wharf at Ballard Pier Station. Passengers have, of course, to pass their luggage through the Custom House. The hotel authorities and various agents send representatives to meet passengers on landing, and it will be found most convenient to entrust the baggage to one of them, furnishing him with a detailed list of the boxes. Customs forms, to be filled up with the contents of large packages, and with all articles liable to Customs duty, are usually provided on board the steamer. The Customs examination is not severe, if a fair declaration seems to have been made. Articles for the *bonâ fide* personal use of the traveller are not usually charged with duty. Special care is exercised as regards firearms. If these have not been in India before, or have not been in India for a year, a high *ad valorem* duty is levied on them, and they cannot be removed from the Custom House until the

duty is paid, or a certificate is given that a full year has not elapsed since the owner left India.

Travellers who are making their first visit to the East will be struck by the novelty of the scene on landing in Bombay. The quaint native craft in the harbour; the crowds of people dressed in the most brilliant costumes and varied headgear; the Hindus of different castes; the Muhammadans, Jews, and Parsis, with a sprinkling from other nationalities; the gaily-painted bullock-carts; these and similar sights combine to make a lasting impression on the stranger's mind.

For the good hotels, restaurants, and shops, and for leading doctors, etc., the Index under *Bombay* should be consulted.

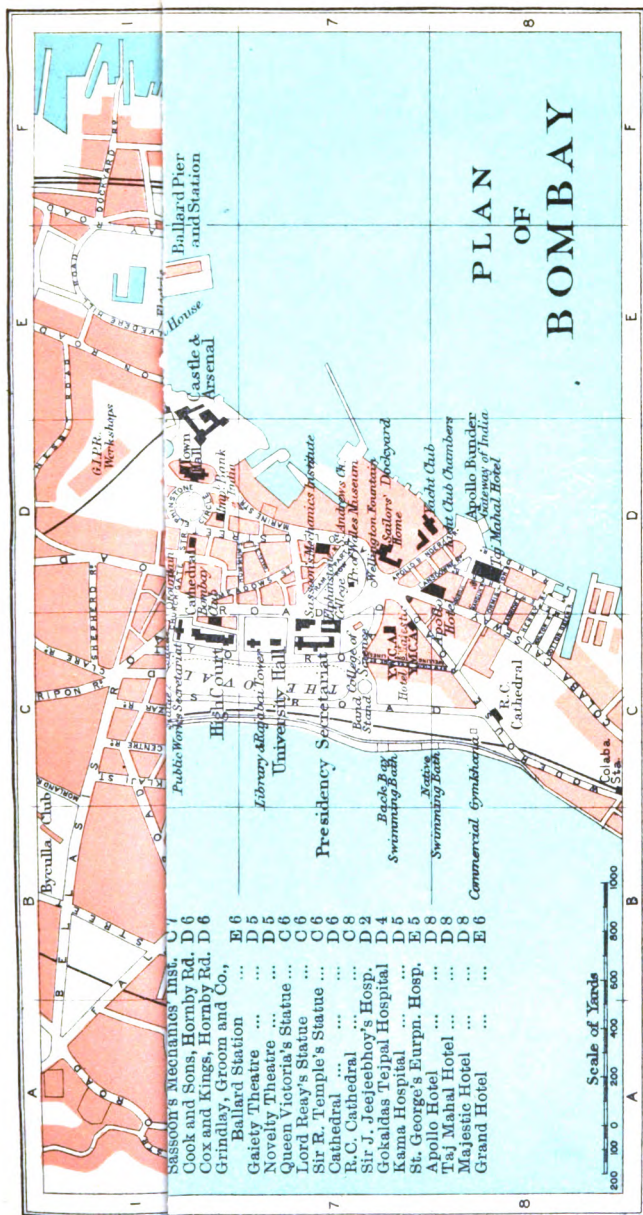
Railway Communications.—The visitor who desires to proceed at once "up country" on landing in Bombay, will find three luxuriously appointed express trains, with restaurant cars and carrying first-class passengers only, awaiting his choice at the Ballard Pier Station. The Imperial Indian Mail (surcharge in addition to ordinary fare Rs.26, including reservation fee) leaves for Calcutta (Howrah) about 7 hours after the mail steamer is signalled. The route taken is *via* Itarsi, Jubbulpore, Chheoki (for Allahabad), Moghal Sarai (for Benares) and the Grand Chord line of the East Indian Railway (Route 2): and the time occupied on the journey (1349 m.) is approximately 39 hrs. The "Punjab Limited," which proceeds also over the Great Indian Peninsula Ry. from Itarsi by way of Bhopal, Jhansi, Agra and Muttra (Route 9), runs to Delhi (957 m.) in 26 hrs. and thence to Lahore in 37 hrs. and Peshawar in 48 or 50 hrs. The third train is the "Frontier Mail," which runs over the Bombay, Baroda and Central India Railway, *via* Baroda, Rutlam, Kotah,

Sawai Madhopur (for Jaipur), Bharatpur (for Agra), and Muttra (Route 12) to Delhi (865 m.) in 23½ hrs. and thence to Lahore in 32 hrs., and Peshawar in 42½ hrs. It is claimed that this is the fastest train in India and that the average speed between Bombay and Delhi, including halts, is 41 m. an hour, in spite of the fact that the track passes over numerous heavy rising grades. Arrangements for accommodation in these special trains should be made in advance, either on board the mail steamer or at the P. and O. office in London. Visitors who do not travel by these trains proceed to either of the railway terminal stations: **Victoria** (G.I.P. Ry.) or **Colaba** (B.B. and C.I. Ry.). The "Frontier Mail" runs daily from Colaba station, and also the Bombay-Peshawar Express, the Gujarat Mail between Bombay and Ahmadabad (Route 10), and the Kathiawar Mail from Bombay to Viramgam (Route 11); the two last connect with the Metre-Gauge Mail at Ahmadabad for Abu Road (Mount Abu), Ajmer, Jaipur and Delhi (Route 10). From the Victoria Terminus there are two express services daily to Calcutta; *via* Jubbulpore (E.I. Ry.) and (Route 7), *via* Nagpur (Bengal-Nagpur Ry.); express to Madras (33½ hrs.), *via* Poona, Wadi (for Secunderabad) and Bezwada (Route 26); and an express to Delhi, which follows the same route as the "Punjab Limited."

General Description of Bombay and its Suburbs.—The visitor who halts in Bombay should, after shopping and lunch, visit Malabar Hill (from which a grand view of the Back Bay is possible), the Queen's Road Burning Ghat, the Zoo, the Prince of Wales Museum, and the Old Fort behind the Town Hall. If he has friends, he should go to the Royal Bombay Yacht Club and drive to the Willingdon Sports Club near the Racecourse.

The road from the Ballard Pier,

after leaving the Grand Hotel on the right and passing the Custom House, a handsome building in the early Italian renaissance style, skirts the newly laid-out Ballard estate of the Bombay Port Trust, now fully covered by business houses, and enters the circuit of the Old Fort of Bombay just above the ancient Castle. From this point Mint Road leads N. to the Victoria Station and onwards to the main part of the Indian city—Marine Street and Apollo Street lead S. to Rampart Row along the S. side of the Fort, and the open space W. of the Apollo Bunder—and Church Gate Street leads W. to Esplanade Road, which follows the landward line of the former defences, and to the Back Bay on the Western side of the Island, beyond which most of the residences of the more wealthy classes are situated. At Church Gate Street is a statue of the late Mr E. S. Montagu. Between the shore and Esplanade Road, which runs parallel to it, is the range of Public Offices. S. of the open space, near which all the principal hotels are situated, extends the promontory of Colaba; and Northwards, along the course of the Back Bay, Queen's Road leads to Malabar Hill, which bends round the N.W. side of the bay, and is continued to the N. by Cumballa Hill; from both of these beautiful views of the Back Bay and of the sea are obtained. E. of the two hills and of the Northern part of Queen's Road lies the Indian city, with the quarters of Byculla and Mazagon along the north side of it. In Parel, above Byculla is the principal location of the Bombay Mills; in Mazagon are the P. & O. Docks, below which, and E. of the main city, lie the Prince's, Victoria and Alexandra Docks. To the S. of the Indian city, and between it and the N.W. side of the Fort, are a number of imposing buildings, including many places of business, though several of the houses con-



nected with the trade of the port are still situated inside the Old Fort.

PUBLIC OFFICES.

The impressive Government buildings already mentioned succeed one another in the following order: from S. to N., the Prince of Wales' Museum and the College of Science S. of the Secretariat; then come the Presidency Secretariat, the University Hall, Library, and Clock Tower, the High Court, the Public Works' Secretariat, the Telegraph Office, and the Fort (once the General) Post Office.

The **Presidency Secretariat** is 443 ft. long, with two wings 81 ft. long. In the first floor are the Council Hall, 50 ft. long, Committee Rooms, Private Rooms for the Governor and Members of Council, and the offices of the Revenue Department. The second floor contains the offices of the Judicial and Military Departments. The style is Venetian Gothic, and the designer was Colonel Wilkins, R.E. The carving is by Indian artists. The staircase is lighted by the great window, 90 ft. high, over which rises the tower to 170 ft. At the entrance are the arms of Sir Bartle Frere (who was Governor when the plans were formulated for erecting public buildings, and to whom Bombay owes many of its improvements), and Sir Seymour Fitzgerald (1869-72).

University Hall.—This ornate building, in the French Decorated style of the 15th century, is 104 ft. long, 44 ft. broad, and 63 ft. high to the apex of the groined ceiling, with an apse separated from the Hall by a grand arch, and a gallery, 8 ft. broad, round three sides. The painted-glass windows have an excellent effect. The Hall, designed by Sir Gilbert Scott, R.A.,

is called after Sir Cowasjee Jehangir Readymoney, who contributed Rs.100,600 towards the cost of erection. It was completed in 1874. A statue by Woolner of Sir Cowasjee stands in the University Gardens: and another of Mr Thomas Ormiston, the designer and builder of the Princes Dock (p. 20).

The **University Library and Clock Tower** form a grand pile, designed by Sir Gilbert Scott in the style of 14th century Gothic. The Library is a long, low room, adorned with carving, and the great **Rajabai Tower** on the W. side forms part of it, and is from its height (260 ft.) the most conspicuous building in Bombay. It was built at the expense of Mr Premchand Raichand, in memory of his mother, Rajabai, and cost Rs.300,000. He also gave Rs.100,000 for the Library. The Tower is divided into six storeys, and is surmounted by an octagonal lantern spire, with figures in niches at the angles. There are twenty-four figures in all upon the tower, representing the castes of W. India. The first floor forms part of the upper room of the Library, and the second contains a study for the Registrar. There is an opening several feet square in the centre of each floor, so that one can look up 115 ft. to the ceiling of the Dial Room. The fourth floor contains the great clock. Under the dials outside are four small galleries, with stone balustrades. From the top of the tower there is a fine view of Bombay. On the E. are the harbour, fringed with islands, Mody Bay, and the Fort; and to the W. are Malabar Hill and Back Bay; and to the S., Colaba Point.

The **High Court** is passed on the right by proceeding down Mayo Road towards Church Gate Street. This immense building, 562 ft. long, with a tower 175 ft. high, was

designed by General J. A. Fuller, R.E.; it is said to have cost £100,000, and was opened in 1879. The style is Early English. The principal entrance is under a large arched porch in the W. façade, on either side of which is an octagon tower 120 ft. high, with pinnacles of white Porbandar stone, and surmounted by statues of Justice and Mercy. The main staircase is on the E. side, and is approached by a noble groined corridor in Porbandar stone, which runs through the building. The offices of the High Court are on the first and third upper floors. The Appellate and Original Courts are on the second floor. The Criminal Court is in the centre of the building, above the main corridor, and has a carved teak gallery for the public running round three sides. The ceiling is of dark polished teak in panels, with a carved centrepiece. The floor is Italian mosaic. A number of portraits of past Chief Justices and Judges hang in the different Courts.

Next to the High Court and separated from the old Post-Office by Church Gate Street, a broad road which leads E. to Elphinstone Circle and W. to the Church Gate Station of the B.B. and C.I. Railway, is the **Public Works' Secretariat**, with a façade 288 ft. long, the central part having six storeys. The Railway, Irrigation, and other Engineering Departments are accommodated in this office.

On the S. side of the arm of the road leading to the W. are the **Statues** of three former Governors of Bombay, Sir Richard Temple (1877-80), Lord Reay (1885-90), and Lord Sandhurst (1895-1900). Opposite, on the corner site formed by Marine Lines and Queen's Road, is the fine office of the B.B. and C.I. Railway, which has a façade 280 ft. long and a tower 160 ft. high.

The **Old General Post-Office** which has been absorbed into the Telegraph Office, is opposite the Public Works Secretariat in Church Gate Street and was designed in the mediæval style by Mr Trubshawe. It has three floors, and is 242 ft. long, with wings on the N. side. Part of it is used as a Post-Office for the Fort area. The **New General Post-Office** (p. 17) is near the Victoria Terminus Station.

The **Telegraph Office**, which is behind the old Post-Office, is built in Romanesque style and has a façade 182 ft long. The facing of it and of the Post-Office is of coursed rubble stone from Kurla, in Salsette, and the columns are of blue basalt.

North of the Telegraph Office at the junction of the Mayo and Esplanade Roads, which flank the above buildings on either side, is the **Statue of Queen Victoria**, by Noble. It is of white marble, and cost Rs.182,443, of which Rs.165,000 was given by H.H. the late Maharaja Khande Rao Gaekwar, of Baroda. The statue was unveiled by Lord Northbrook in 1872. Her Majesty is represented seated. The Royal Arms are in front of the pedestal, and in the centre of the canopy is the Star of India, and, above, the Rose of England and Lotus of India, with the mottoes "God and my Right," and "Heaven's Light our Guide," inscribed in four languages.

Returning S. from this point to the Flora Fountain (which was erected in honour of Sir Bartle Frere), and following Church Gate Street into the area of the Fort, Elphinstone Circle, occupying the site of the old Green, is reached. In Esplanade Road, running S. from the fountain, and in Hornby Road, running N., and together marking the western limits of

the Fort, are the **Bombay Club** and the principal shops and places of business. On the N. side of Church Gate Street, in Bazar Gate Street and set back from the road, are the headquarters of the Chamber of Commerce, and on the S. side is the **Cathedral of St Thomas**. This was begun by Gerald Aungier in 1672, but was not formally opened until 1718. In 1816 it was consecrated by Bishop Middleton of Calcutta, who had created an Archdeaconry of Bombay in 1814. Upon the installation, in February 1836, of Dr Carr as the first Bishop of Bombay, it became the Cathedral of the Diocese, and the low belfry was converted into a high tower. It is simple in plan, and a mixture of the classical and Gothic in style. The chancel, added 1865, is a satisfactory specimen of modern Early English. Among the monuments is one by Bacon to Jonathan Duncan (1811), Governor for sixteen years. It represents him receiving the blessings of young Hindus with reference to his successful efforts in suppressing infanticide in certain districts near Benares, and afterwards in Kathiawar, through the zealous and able agency of Colonel Walker. Another beautiful monument by Bacon, in the form of a medallion on the E. wall, commemorates Katharine Kirkpatrick (1760), whose son, Major-General William Kirkpatrick (Resident at Hyderabad in 1797), was the grandfather of Sir Richard and Sir John Strachey. There are also monuments to Captain G. N. Hardinge, R.N., who died in 1808 in a brilliant engagement, when he took the famous French cruiser *Piémontaise*; Col. Burr, who commanded at the battle of Kirkee (5th November 1817); Colonel John Campbell, the defender of Mangalore against Tipu Sultan in 1784; Commodore John Watson, mortally wounded at the siege of Thana in 1774; General John

Carnac (1800), who had served with Clive in Bengal, and his wife Eliza Rivett (1780), whose portrait, by Reynolds, is in the Wallace Collection in London; Admiral Maitland (1839), who received Napoleon on board the *Bellerophon*; and Major Pottinger, who distinguished himself in the defence of Herat (November 1837 to September 1838). Bishop Carr's effigy in marble is in the south transept. One of the chalices was the gift of Gerald Aungier in 1675; another was presented in 1632 by the "Greenland merchants of the City of York." The fountain in front of the Cathedral was erected by Sir Cowasjee Jehangir Readymoney, at a cost of Rs.7000.

The **Elphinstone Circle** is surrounded by handsome buildings and at the E. side opens on to the Town Hall; in the middle is a well-kept garden with marble statues by Bacon of Lord Cornwallis and the Marquis Wellesley. From the centre of the S. side, Bank Street leads to the **Imperial Bank of India**.

The **Town Hall**, designed by Col. T. Cowper, was opened in 1835, and cost about £60,000, by far the larger portion being defrayed by the E.I. Company. The building has a colonnade in front, and the façade is 260 ft. long. The pillars in front, and the external character of the edifice, are Doric; the interior is Corinthian. On the ground floor are the Medical Board offices, the office of the Military Auditor-General, and some of the weightier curiosities of the Asiatic Society. In the upper storey will be found the Grand Assembly Room, 100 ft. square, in which public meetings and balls are held; the Assembly Room of the **Bombay Asiatic Society**; and (in a wing) the fine **Library** of this Society, founded in 1805 by Sir James Mackintosh when Recorder of Bombay (1804-

1811), containing about 100,000 volumes. The Bombay sessions of the Legislative Council are held temporarily in the Town Hall. The Levee Rooms of the Governor and the Commander-in-Chief, and the Council Room, are no longer used for their original purposes. The place of honour in the Grand Assembly Room is occupied by a statue of the distinguished Governor Mountstuart Elphinstone (1819-1827), executed by Chantrey, as were also those of Sir J. Malcolm (Governor 1827-1830), and Sir C. Forbes, which are also in the building. At the head of the staircase, on one side, is a fine statue, by Foley, of Lord Elphinstone, the Governor during the Mutiny, and on the other side is a statue, by Woolner, of Sir Bartle Frere, an excellent likeness. Between the circular flights of stairs is Marochetti's statue of Sir Jamsetjee Jeejeebhoy.

The Council Room contains pictures by James Wales (who died at Thana in 1795), of Madho Rao Peshwa (1774-1795), his celebrated minister, Nana Farnavis (1763-1800), and the equally famous Mahdaji Rao Sindhia (1769-1794). There is a portrait group of these three personages by the same artist at Government House, Ganeshkhind (Poona). In the Library of the Asiatic Society, instituted in 1804 for the investigation and encouragement of Oriental Arts, Sciences, and Literature, are busts of Sir James Rivett-Carnac (Governor 1838-41) by Chantrey, and Sir J. Mackintosh. The Geographical Room contains pictures of Sir A. Burnes, and of Sir J. Malcolm and Captain Ross, the two first Presidents of the Geographical Society; also a very fine collection of maps. These two Societies are now amalgamated.

The Mint is close to the Town Hall, but farther back, having a tank in front of it. It is a plain building, with an Ionic portico,

designed by Major J. Hawkins, and completed in 1829. Authority was granted to the Company by the Crown to establish a mint so early as 1676. A new street, Pherozeshah Mehta Road, runs due E. and W. through the former Gunbow Street from Hornby Road to a point almost opposite the Mint.

N. of the Mint, at the E. end of the Ballard Road, which leads to the Ballard Pier (p. 7), are the imposing **Offices of the Port Trust** (p. 20). At the junction of the W. end of Ballard Road with Frere Road, leading to the N. past St George's General Hospital, is the Ruttonjee Mooljee Fountain.

Immediately behind the Town Hall are the remains of the **Castle** of the Old Fort, now used as an Arsenal. Only the walls facing the harbour and a portion of the wall to the N. now remain. There is a flagstaff here from which signals are made to ships, and also a clock tower, where a time signal-ball, connected by an electric wire with the Observatory at Colaba, falls at 1 P.M.

In the **Arsenal**, is an interesting collection of ancient arms and old Indian weapons of various descriptions. The old **Custom House** is a large and ugly building, a little to the S. of the Town Hall.

The **Government Dockyard**, originally constructed in 1736, extends hence to the Apollo Gate, with a sea-face of nearly 700 yds. and an area of about 200 acres. It was here that His Majesty King Edward landed in 1875. There are five graving docks, three of which together make one large dock 648 ft. long, the other two graving docks making a single dock 582 ft. long. There are also four building slips opposite the Apollo Pier and on the S.E. side of the enclosure. Bombay is the only important place near the open sea in India where the rise of the

tide is sufficient to permit docks on a large scale. The highest spring tides reach to 17 ft., but the usual height is 14 ft. In the dockyard four generations of a Parsi family of the name of Lowji Wadia gained much renown during the 18th century, and built a number of British men-of-war.

From the dockyard Marine Street leads into Apollo Street and past the old Great Western Hotel (now a block of offices and formerly the High Court building) and St Andrew's Presbyterian Church, built in 1818, to the open space S. of Rampart Row, W., marking the Southern side of the Old Fort. On the left here is the fine building which served until very recently as the **Royal Alfred Sailors' Home**, with accommodation for 100 inmates.¹ The sculpture in the gable, representing Neptune with nymphs and sea-horses, was executed by Mr Bolton of Cheltenham. His late Highness Khande Rao Gaekwar gave Rs.200,000 towards the cost of the building to commemorate the Duke of Edinburgh's visit, and the foundation-stone was laid in 1870 by the Duke. The Home, which is now too far from the Docks to serve its original purpose, has been taken over by the Government, and a Chamber for the Bombay Legislative Council is being built at the back. Opposite the Home is the Prince of Wales Museum of W. India. A bronze statue of His Majesty, King George V. (the gift of Sir Sassoon J. David), flanks the Museum on this side, as that of King Edward (p. 14) flanks the site on the other side.

The **Wellington Fountain**, erected in 1865 to commemorate the visits of the Duke to Bombay in 1801

and 1804, stands opposite the Sailors' Home at the junction of the Esplanade and Apollo Bunder Road. The latter road leads E. from the Wellington Fountain to the Apollo Bunder Pier, originally known as the Wellington Pier, passing between the **Yacht Club** on the left hand, and **Sardar's Mansions**, and **Yacht Club Chambers** on the right. The Club has a charming terrace-garden on the sea-front. Situated on the **Apollo Bunder** is the **Gateway of India**, a monumental structure erected to commemorate the landing of King George V. and Queen Mary on the occasion of their visit to India in December 1911. Formerly the Apollo Bunder was used in the fair seasons for the landing and departure of passengers and mails and an iron shed, with a curved roof, after the style of a Mongol tent, provided shelter while waiting on the Bunder. For the reception of their Majesties, the present King and Queen, in 1911, this shed was removed and a temporary pavilion and hall erected in white plaster. After the Royal visit it was suggested by Lord Sydenham, then Governor of Bombay, that a permanent pavilion should be erected to commemorate the event which would form a sea gateway to India and provide a reception hall for all important occasions. The scheme was carried out by his successor, Lord Willingdon, who both modified and improved it. The gateway consists of a central hall with a smaller hall on either side; the central hall with its great archways forming the entrance, while the side halls provide seating accommodation for 600 people. The design of the building (which was prepared by Mr G. Wittet, F.R.I.B.A.) is Indian in character, based on the work of the 16th century in Gujarat. The stone is yellow basalt obtained in the vicinity of Bombay, with the exception of the pierced stone-

¹ The building occupies part of the site of the old cemetery at Mendhams Point. This was closed in 1760 in order that a clear field of fire from the Fort might be secured, and the tombstones were razed to the ground.

work in the arches of the side halls, which is from Gwalior State. The three halls are roofed over with domes supported on vaulting.

On either side of the head of the Colaba Causeway, running S. from the fountain, are the Y.M.C. Institute and the Apollo Hotel, and a little farther S. is the Taj Mahal Hotel, on the sea-shore. At the corner of the causeway and the adjacent Wodehouse Road, named after Sir Philip Wodehouse (Governor of Bombay 1872-77), is the Hotel Majestic, and just beyond are the new Roman Catholic Cathedral of the Holy Name and the official residence of the Roman Catholic Archbishop of Bombay. The Causeway leads past the old Cotton Green (now removed to Sewri), the Sassoon Dock (650 ft. long, and the first wet dock made in India), and the B.B. and C.I. Railway terminal station¹ to the promontory of Colaba, formerly a separate island, with St John's Church, the European Infantry Barracks, and the Observatory. The Church, erected as a memorial of the first Afghan War, and consecrated in 1858, consists of nave and aisles 138 ft. long, with a chancel 50 ft. long, and a tower and spire 198 ft. high, conspicuous for some distance at sea. The effect on entering is good, owing to the length and height of the building, the simplicity of the architecture, and the "dim religious light" diffused through the stained-glass windows. The roof is of teak. The illuminated metal screen, light and elegantly designed, is surmounted by a gilt cross. About $\frac{1}{4}$ th of the cost of the spire was contributed by Mr Cowasjee Jehangir in 1864, a striking instance of Parsi liberality and of good feeling between Parsis and Europeans.

¹ A new terminus for the long-distance traffic of the B.B. and C.I. Railway is under construction in Bellasis Road, Byculla.

The "memorial marbles" are of alternate colours of white, red, yellow, and blue; and beneath them runs the following inscription, painted on a blue ground:—

This Church was built in Memory of the Officers whose names are written above, and of the Non-Commissioned Officers and Private Soldiers, too many to be so recorded, who fell, mindful of their duty, by sickness or by the sword, in the Campaigns of Sind and Afghanistan, A.D. 1838-1843.

At the extremity of the promontory are the Old Lighthouse, and an old European Cemetery. The present lighthouse is on Prong Island, $\frac{1}{4}$ m. S. of Colaba Point, with which it is connected by a ridge of rock exposed at low tides; it is 150 ft. high, and the light which flashes every 10 secs. is visible 18 m. off at sea. Another lighthouse on Khanderi Island marks the N. entrance to the harbour. This island and the adjoining island of Underi, which are about 7 m. S. of the entrance, are known to mariners as Hendry Kendry, and were occupied by pirates up to the beginning of the 19th century.

Returning to the Wellington Fountain, the Esplanade Road along the W. side of the open ground leads past a fine block of buildings, consisting of the Museum, the Science Institute, the Elphinstone College, the Sassoon Institute and the Army and Navy Stores. Opposite the Stores is the equestrian statue of King Edward as Prince of Wales, by Sir Edgar Boehm, presented to the city by Sir A. Sassoon at a cost of £12,500.

The Prince of Wales Museum of Western India.—This fine building, the foundation-stone of which was laid by H.M. George V., then Prince of Wales, in 1905, on the occasion of his first visit to India, occupies an island site at the Southern end of Esplanade Road. The scheme consists of three units, arranged round three

sides of a quadrangle, the central block being the only one built up to the present. The style of the structure is based on the Indian work of the 15th and 16th centuries in the Presidency, and the materials used are the blue and yellow basalt found in the vicinity of Bombay. The buildings were designed and carried out under the supervision of Mr G. Wittet, F.R.I.B.A., Architect to the Government of Bombay.

Its contents comprise Art, Archæology, and Natural History. A section devoted to Forestry has been added, and a small local Geological collection of Rocks, Minerals and Fossils is also exhibited.

Art Section.—This consists principally of the Sir Ratan Tata bequest of pictures, a splendid collection of Oriental arms, a varied and unique exhibit of jade, beautiful examples of china, Indian brass, silver, Indian and Persian draperies and *objets d'art*. Other pictures have been presented by Sir Dorab Tata. Among Sir Ratan Tata's pictures are many most interesting examples of the Dutch, British, French, and Italian Schools, and works by such masters as Cuyp, Lawrance, Romney, Gainsborough, Troyon, Poussin and Titian. Sir Dorab Tata's gift includes representative works of the late Italian Schools and a few good modern French and British pictures. There is also a collection of Indian paintings (Mughal and Rajput) and an extremely interesting collection of relics of the Satara Kings, both purchased from Mr P. V. Mavji in 1914.

Archæological Section.—This contains three main divisions, the Brahmanical Section; Jain, Prehistoric, and Foreign antiquities; and the Buddhist Section. In the first category are some large bas-reliefs discovered at Dharwar and attributed to the 5th or 6th century, A.D.; a bust of Siva from the Elephanta Caves

(p. 28); numerous other interesting sculptures of Siva, some images and bas-reliefs of Brahma, a magnificent image of Vishnu (from Elephanta), and a miscellaneous collection of images, bas-reliefs, and articles used in Brahmanical worship. The prehistoric antiquities are mostly from Madras, and comprise paleolithic and neolithic implements; also pottery, including examples of necropolitan pottery utilised for coffins. A number of interesting bas-reliefs come from Mesopotamia and some good Jain sculptures are on permanent loan from the Bombay Branch of the Royal Asiatic Society. In the Buddhist Section are portions of the Stupa of Amaravati, some terra-cotta figures of Buddhas and Bodhisattvas, fragments and images of Buddhas (Gandhara School) and very interesting bas-reliefs (of the same school) representing subjects from Buddhist legend. Other exhibits of votive seals, miniature stupas, and miscellaneous clays are noteworthy.

Natural History Section.—The exhibits in this section are specimens from the collections of the Bombay Natural History Society. These include excellent examples of all the Indian bovines: several species of wild sheep, wild goats, serows, goral and takin; heads of nilgai, black buck, and chinkara, and of the muntjac, bara singh, Kashmir stag, and the rare shou; and sambhar, spotted deer and swamp deer give a representative illustration of the various species of Indian antelopes and deer. Good heads of African animals are also shown. Among the specimens of carnivora are a fine lion, some excellent tiger skins and a record tiger skull, besides other very interesting examples of the *Felidæ*. The Indian wolf and other examples of the *Canidæ* are well represented, and good exhibits of the brown and sloth bears

are shown. The Insectivorous Mammals and Rodentia are represented by a large series of skins and case specimens. The Birds' Section contains besides many beautiful specimens, a collection of drawings by Gronwold. The Reptiles include an exhibit illustrating the various poisonous snakes of the country, and resemblances between certain poisonous and non-poisonous species. Fishes and insects form an interesting feature of this section.

Forest Section.—This includes most interesting specimens of timbers grown in the Bombay Presidency.

The Royal Institute of Science.—This important group of buildings owes its inception to Lord Sydenham when Governor of Bombay (1907-13), who laid the foundation-stone in 1911, and to the generosity of Sir Jacob Sassoon, Sir Cowasji Jehangir, Sir Currimbhoy Ebrahim, and Sir Vasanji Tricumji Mulji, who furnished contributions for the erection of the various units. The scheme consists of a College of Science occupying a three-storey block fronting Mayo Road, a science library, a public hall at the corner of Mayo Road and Esplanade Road, and a block of examination schools facing Esplanade Road. The building, which is Renaissance in character, is constructed of yellow basalt stone, obtained from quarries in the vicinity of Bombay. The Architect was Mr G. Wittet, F.R.I.B.A. Opposite the Institute stands a statue of the present Prince of Wales, erected in 1927 to commemorate H.R.H.'s visit in 1921.

The Elphinstone College, removed from Byculla in 1890 (p. 21), now occupies a large building in the Romanesque Transition style, which cost 7½ lakhs of rupees. The main hall is called after Sir Cowasjee Jehangir Readymoney,

in recognition of his large contribution for the purpose of building the original institution. The Elphinstone Institution was founded as a memorial to the Hon. Mountstuart Elphinstone, the Governor of Bombay. In 1856 it was divided into a High School (see p. 18), and this College for the higher education of Indians. Sir Alexander Grant, Bart., was Principal of the College in 1862, and distinguished scholars, such as Sir Ramkrishna Bhandarkar, the great Orientalist, have filled Professorships. In the library is a fine portrait of Elphinstone by Sir T. Lawrence. The **State Record Office** and **Patent Office** occupy the W. wing of the College. Amongst the records are preserved the oldest documents relating to the E.I. Company (the letter-books of the Surat Factory go back as far as 1630), and many other priceless historical papers, including the letter of the Duke of Wellington announcing the victory at Assaye.

The Mechanics' or Sassoon Institute was founded originally in 1847, but refounded and renamed by David Sassoon and his son Sir Albert in 1870, and cost £15,000. Lectures are delivered and prize medals awarded. In the entrance hall is a statue of Mr David Sassoon, by Woolner. There is also a good library.

From here Esplanade Road, with the Bombay Club on its W. side beyond the University Gardens, leads across Church Gate Street to Hornby Road. On the W. side of the entrance to Hornby Road are the lofty Oriental Buildings, and a little beyond them on the same side of the road are the Chartered Bank and Standard Buildings, while a little back in Outram Road is the Cathedral High School for boys. On the right is the lofty building of the Jamsetjee Jeejeebhoy Institute, founded in 1849 by Sir Jamsetjee Jeejeebhoy, who, with Lady

Avabai, his wife, set apart for the purpose 3 lakhs of rupees and 25 shares in the Bank of Bengal, to which the Parsi Panchayat added 35 shares more. The Government of India are the trustees, and pay interest at 6 per cent. on the 3 lakhs, and the capital of the Institution now amounts to 12 lakhs. The income is divided into 400 shares, of which 180 go for the Boys' and Girls' Schools in Bombay, 70 for those in Surat, and 150 for charities for the poor. Farther N. rise two great architectural piles, one on either hand—the Terminus Station and Offices of the G.I.P. Railway to the E., and the Municipal Offices on the W. Between them, on a circular garden plot, is a statue, by Brock, of the late Sir Dinshaw Petit, first Baronet.

The new **Victoria Terminus** in Hornby Road, which serves the main lines of the G.I.P. Railway, can claim to be the finest and most up-to-date railway station in India. It was opened on 27th March 1929, by the Governor, Sir Frederick Sykes; and contains, as well as refreshment-rooms, bed- and dressing-rooms and bath-rooms for the accommodation of travellers. The former station, which adjoins, is now reserved for suburban traffic. It was completed in 1888, and is an imposing building, with a large central dome. S. of it is the fine large structure of the **General Post-Office**, which occupies the block in Frere Road between Fort Street and St George's Road. It was erected under the supervision of Mr G. Wittet, and was designed by Mr J. Begg in the Bijapur style of architecture (p. 572). S.E. of the railway station, in a well-laid-out garden, is **St George's General Hospital** for Europeans, with 140 beds; it has a convalescent home at Khandala (Route 26).

The **Municipal Buildings** were designed by Mr F. W. Stevens, and

were opened in 1893. The Oriental feeling introduced into the Gothic architecture has a pleasing effect. The tower, 255 ft. high, and surmounted by a masonry dome, can be seen from all parts of Bombay. The central gable terminates in a statue 13 ft. high, representing "*Urbs prima in Indis*." The grand staircase is also crowned by an imposing dome. Immediately in front of the building is a statue by Derwent Wood of the late Sir Pherozeshah Mehta, who took a prominent part in the civic life of Bombay.

Opposite these buildings Waudby Road leads S.W. to the Queen's Statue, passing the Gaiety and Novelty Theatres, the United Free Church of Scotland, the Masonic Hall, and the Alexandra School for Girls, founded by Mr Maneckjee Cursetjee, to the E. of it, and the open space of the Maidan or General Parade Ground and the Bombay Gymkhana Club on the W. At the corner of the Maidan, opposite the Municipal Buildings, is a statue of the late Mr Jamshedji Tata, flanked by allegorical figures.

From the **Victoria Railway Station**, Hornby Road continues N. up to the Crawford Market and the main Indian residential quarters, passing on the left the *Times of India* Office, the Anjuman-i-Islam (Islamia) School, the Church of the Holy Trinity, and the School of Art; while from the station to the N.W. runs Cruikshank Road in front of the Municipal Offices, and past the Police Courts, the Allbless and Cama Hospitals, St Xavier's College, and the Elphinstone High School. On Carnac Road, which joins these two roads and forms the third side of a triangle with them, are the St Xavier's High School and the Gokaldas Tejpal General Hospital. Paltan Road, which runs behind the Market and is so-called from the Barracks which were formerly in that

quarter, forms the commencement of Sydenham Avenue, a new thoroughfare which crosses Carnac Road and penetrates through the densely-populated Indian city in a slight curve until it joins Parel Road close to Sandhurst Road. Under the name of Kingsway, Parel Road continues past the King's Circle as far as Sion (11 m.).

The Anjuman-i-Islam School was erected by the co-operation of Government, which gave the site, valued at Rs.158,000, with a money-grant of Rs.38,000, the Muhammadans themselves subscribing Rs.160,000, of which Rs.50,000 were set apart as an endowment. The building was opened by Lord Harris in 1893, and the erection of it marks an epoch in the history of the Muhammadan community. The building, which is of most pleasing appearance, and has a tower 125 ft. high, was designed by Mr J. Willcocks, of the Public Works Department.

The Sir Jamsetjee Jeejeebhoy School of Art, called after that distinguished Parsi baronet, who contributed Rs.100,000 towards it, was first opened for pupils in 1857. In 1877 the present handsome building was erected for it. Excellent drawings and designs are made here, as well as good pottery, arms, artistic work in silver and copper, and decorative carving in wood and stone. The buildings in Western India owe much of their beauty to students of this institution. The latest additions to it are the Sir George Clarke Studios and Technical Laboratories, which include the Art Pottery Works, where some beautiful designs, purely Indian in form and ornament, have been carried out. Mr Rudyard Kipling was born in Bombay, while his father, Mr J. Lockwood Kipling, was Principal of the School.

The Gokaldas Tejpal Hospital, for Indians, can contain 150 patients, and is generally full. The annual number of out-patients is over 13,000. It owes its origin to a gift of £15,000 made by Mr Gokaldas Tejpal, and a similar gift by Mr Rustomjee Jamsetjee Jeejeebhoy.

St Xavier's College in Cruikshank Road, and St Xavier's High School in Carnac Road, founded in 1867, are now separate institutions, both under the Jesuit fathers. The College, which is affiliated to the University, and has 800 students, includes a highly-equipped science department. The High School (1200 pupils) is a massive building, with a high octagonal tower.

Opposite the High School is the Court of Small Causes. Near by, was formerly the Robert Money School, founded in 1838, but now removed to Girgaon and under the management of the C.M.S.

The Elphinstone High School is the Government public school of Bombay, and retained possession of the original buildings on this site when the College Department was separated to form the Elphinstone College. In front of it is a fine flight of steps.

The object of this school is to furnish a high-class and liberal education up to the standard of the University entrance examination, at fees within the reach of the middle-class people of Bombay and the districts. It has classes for the study of English, Marathi, Gujarati, Sanskrit, Latin, and Persian, and contains 28 classrooms, a large hall on the first floor, and a library. There are 700 scholars in the school under a Principal, and 42 masters; there are also instructors in drill and cricket. The building, which is 452 ft. long, was designed by Mr

G. T. Molecey. Sir A. Sassoon contributed 1½ lakhs of rupees towards it.

The Pestonji Kama Hospital, for *Women and Children*, is a Gothic building containing 75 beds. It owes its existence to the gift of Rs.164,000 by Mr Pestonjee Hormusjee Kama, as the Allbless Obstetric Hospital beyond it does to the munificence of Mr Bomanjee Eduljee Allbless. The latter contains 30 beds. Both are under the Dufferin Fund and the sole management of lady doctors, the nursing being done by the Sisters of All Saints, who also nurse in the Jamsetjee Jeejeebhoy and St George's Hospitals. Farther E., and adjoining the Municipal Offices, are the lofty buildings of the Esplanade Police Courts, erected in 1884-88.

The Crawford Market, which is situated at the junction of Hornby Road and Carnac Road, was founded by Mr Arthur Crawford, C.S., Municipal Commissioner from 1865 to 1871, and cost over 11 lakhs of Rs. It consists of a Central Hall, in which is a drinking fountain, given by Sir Cowasjee Jehangir Readymoney, surmounted by a Clock Tower, 128 ft. high. To the right is a wing, 150 ft. by 100 ft., in which are fruit and flowers, and on the left is another wing, 350 ft. by 100 ft., for vegetables, etc., etc. The whole is covered with a double iron roof. Over the entrance gate are bas-reliefs executed by Mr J. Lockwood Kipling, by whom the fountain was also designed. The ground is paved with flagstones from Caithness. "In that collection of handsome and spacious halls . . . fish, flesh, vegetables, flowers, fruit, and general commodities are vended in separate buildings, all kept in admirable order and cleanliness, and all opening upon green and shady gardens" (Edwin Arnold). There

are many kinds of plantains or bananas; the finest are short, thick, and yellow. The best oranges are those from Nagpur, and the best grapes are from Aurangabad. The mangoes arrive in May; the bulk of them come from Bangalore and other places in the south.¹ The Pummelow, the *Citrus decumana*, is particularly fine in Bombay. The *Fish Market* is at the end of the *Mutton Market*. The turtles come from Karachi, in Sind. The oysters are of moderate size and well-flavoured. The *Palla* fish, generally about 2 ft. long, the salmon of India, is excellent, but has many troublesome bones. The best fish of all is the pomfret, or pomfret, a flat fish. The *Bombil*, called by the English *Bommelo* and *Bombay Duck*, is a glutinous fish, much used when salted and dried. Near the fountain, with its beautiful shrubs, are seats for loungers. On the S. side is the *Poultry Market*, where fowls, ducks, turkeys, snipe, curlew, teal, and occasionally florican may be purchased when in season. The market well deserves a visit early in the morning, though the visitor must expect to find the crowd dense and the hubbub deafening.

A little N.W. of the market, extending to the Back Bay near the Marine Lines Station, is Princess Street, named after, and in 1905 opened by Her Majesty Queen Mary (then Princess of Wales). This was the first arterial thoroughfare opened by the City Improvement Trust. Another main one, Sandhurst Road, runs from the head of the Back Bay to Dongri Street, and through Naoraji Hill to the Docks. Another Trust road, Lamington Road, runs from Queen's Road to Jacob's Circle, past the Byculla Club.

N.E. of the market and between

¹ It was the failure of supplies of Mazagon mangoes which specially annoyed the Wazir Fazl-ud-din in *Lala Rookh*. But the Mazagon mango is now rarely seen.

the main Indian quarter and the sea are the principal commercial **Docks** of Bombay. The **Victoria Dock** (1885-88), covers 25 acres, and has an entrance 80 ft. in width. **Prince's Dock**, lying N. of this and connected with it, was commenced during the Prince of Wales's visit in 1875-76. In excavating it the remains of a submerged forest were found at a depth of about 10 ft. The dock extends over 30 acres, and is capable of containing twenty ocean steamers. It is fitted with a tidal observatory. On the N.W. again is the **Merewether Dry Dock**, and adjacent to the docks is a whole street of warehouses and offices, round which the Harbour Mission centres. South of the Victoria Dock has been constructed the **Alexandra Dock**, of which the foundation-stone was laid by King George V. (then Prince of Wales) on 13th November 1905, and which is the largest in India. It extends S. of the Ballard Pier, and encloses an area of 49.52 acres. The depth of water in it is 47 ft., and the Hughes Dry Dock is 1000 ft. long, and has an entrance 100 ft. wide. The Dock was opened on the 21st of March 1914. The total cost of the works was nearly 600 lakhs. These developments were carried out under the professional charge of the Trust Engineer, the late Mr P. Glynn Messent, C.I.E.

All these docks were excavated on the estate known as the **Elphin-stone and Mody Bay Reclamations**, which have taken in from the sea 483 acres, and have raised and improved 157 acres, transforming the Eastern foreshore of the island from a mud swamp to a busy mercantile quarter worthy of the Capital of Western India. A still greater scheme of reclamation is that more recently completed between Mazagon and Sewri. A grain depot has been established as well as depots for cotton and coal, and the Cotton Green has been moved from Colaba to Sewri.

The whole of the Trustees' Docks are now connected with the two railways which feed Bombay, namely, the G.I.P. Railway and B.B. and C.I. Railway, and by the Port Trust Railway, the point of junction being at Rowlee (Ravali), about 6 m. north of the Alexandra Dock.

The **Port Trust** is composed of twenty-one members under an official Chairman. In 1926-27 its receipts amounted to 264 lakhs and its expenditure to 275 lakhs. During the last half century the value of the trade of the port has increased from 16 crores of rupees till it reached the figure of 202 crores in 1913-14, but, owing to the war, it declined to 140½ crores in 1915-16; the figure for the year 1923-24 was 275.6 crores, and for 1926-27, 245 crores. The number of steamers entering and clearing the port was 6259 in 1926-27, the great majority being ships under the English flag, besides 52,918 sailing vessels. The principal articles of trade are: Imports—cotton, piece-goods, metals, machinery, silk manufactures, railway plant, kerosene oil, sugar, and timber; and Exports—coal, cotton, grain, oil, seeds, tea, hides, raw wool, piece-goods, twist, yarns, and manganese ore. The value of the Foreign trade (excluding Government stores) in 1926-27 was: Imports 112 crores, Exports 72 crores; while the value of the Coasting trade was 31 crores as imports and 27 crores as exports. During the year 1927-28 over 6,700,000 tons of cargo were handled; and imports and exports showed an increase in the record figures of 1913-14. There was, however, a heavy falling off in the export of raw cotton, of which the volume was 33 per cent. below the average of the last five years.

The **Dockyards of the P. & O. Company** and **B.I.S.N. Company** which are worked as one, and

called the Mazagon Docks Company, are in the suburb of Mazagon. The Ritchie Dock is 495 ft. long, and capable of receiving vessels of deep draught. Close by is the Electrical Power Station at Parel (p. 26), which lights the city and runs the tramway service.

In Mazagon is also the **Franciscan Church of Nossa Senhora da Gloria**, which is supposed to have been endowed and built by Antonio Pessoa, Lord of the Manor of Mazagon (1548-71); it was rebuilt in 1810, and is the cathedral of the Portuguese Bishop of Damaun.¹

The visitor can plunge at once into the Indian city by stepping across Carnac Road at the Crawford Market and entering Abdul Rahman Street (which is a prolongation of Hornby Road). It is pre-eminently part of the Muhammadan quarter, which extends along the Parel Road as far as Byculla. The Parsis are to be found chiefly in Dhobitalao, the district between Kalbadevi Road and Queen's Road.

In the City proper the streets and bazars are narrow and tortuous. Some of the houses are remarkably fine as works of art, and have been much influenced by the wooden architectural style of Gujarat. Their fronts are covered with carving, and in some cases they have projecting storeys supported upon elaborately sculptured corbels. Here and there are mosques and Hindu temples gaudily painted. The streets teem with life. Sir Edwin Arnold writes of them: "A tide of Asiatic humanity ebbs and flows up and down the Bhendi bazar, and through the chief mercantile thoroughfares. Nowhere could be seen a play of livelier hues, a

busier and brighter city life. Besides the endless crowds of Hindu, Gujarati, and Mahratta people coming and going between rows of grotesquely-painted houses and temples, there are to be studied here specimens of every race and nation of the East." It has been said that the triangle formed by Kalbadevi Road, Sheikh Memon Street and Carnac Road contains an epitome of the Indian peninsula and a great portion of its wealth.

There are nearly 3000 jewellers of the different Indian nationalities in Bombay, who find constant and lucrative employment. One of the most active industries is the manufacture of brass and copper pots and other utensils. The black wood-carving is famous, as is the sandal-wood and other carving; the term "Bombay Boxes" includes sandal-wood carving as well as inlay work. Tortoise-shell carving is a speciality, also lacquer turnery. Gold and silver thread is manufactured and used for lace, and Bombay embroidery is much prized. The Bombay School of Pottery, under the guidance of Mr George Terry, has developed two original varieties of glazed pottery.

In Bellasis Road, Byculla, are the **Byculla Club** and the **Arab Stables**; the latter are well worth a visit in the early morning, not only for the sake of viewing some of the finest horses in the East, but to see the Arabs themselves who bring them to Bombay for sale. The stables of the importers of Australian horses are also near here.

The **Nal Bazar**, in Sandhurst Road, in the N.W. quarter of the city, supplies a large part of Bombay, and is generally immensely crowded.

A little S. of the Nal Bazar is the **Pinjrapol**, or Infirmary for

¹ The old Portuguese Padroado jurisdiction ceased to exist under an agreement made with the Vatican in May 1928. See under Goa (p. 557).

Sick and Aged Animals, a curious institution, covering several acres, and maintained here, as elsewhere in India, by the Jain community. This place is in the quarter called **Bhuleshwar**, "Lord of the Pure-minded"; and the temple of the deity, a form of Siva, is within the enclosure. To the S.W. is the **Roman Catholic Church of Nossa Senhora da Esperanza**; ¹ and to the S.E. is the **Mombadevi Tank** and Temple, from which the name of Bombay is believed to be derived.² The **Copper Bazar** one of the busiest and noisiest and most delightful streets in Bombay, is opposite the Tank. S. of the Tank is the **Jami Masjid**, and E. of this is **Abdur Rahman Street**, continued N. by **Parel Road**. Near the point where the latter crosses **Grant Road** from the W. is the **Jamsetjee Jeejeebhoy Hospital**, erected in 1845 at the joint expense of that gentleman and the E.I. Company, and having accommodation for 500 patients. In the hall is a bronze statue of Sir Jamsetjee Jeejeebhoy, a copy of one in the Town Hall. Attached to it are a Hospital for Incurables, the **Bai Motlabai Wadia Obstetric Hospital**, and the **Dinshaw Maneckjee Petit Hospital** for women and children, erected in 1889 and 1890.

Adjoining the Hospital is the **Grant Medical College**, established in 1845 in memory of Sir Robert Grant, Governor of Bombay. (1835-38). Besides the Principal and nine professors, there are twelve demonstrators and tutors

¹ The original church, which was built in 1396, stood on the Esplanade and was demolished in 1760, when the present church was built in Kalbadevi at the expense of the Government.

² Momba (Mumba) itself is a corruption of **Maha Amma (Amba)**, Great Mother, a goddess of the Kolis, and probably the tutelary deity of Bombay. The temple and tank originally stood on part of the site of the **Victoria Terminus**, and were demolished in 1737, when the fortifications of the old town were enlarged. The present temple and tank are said to date from 1753.

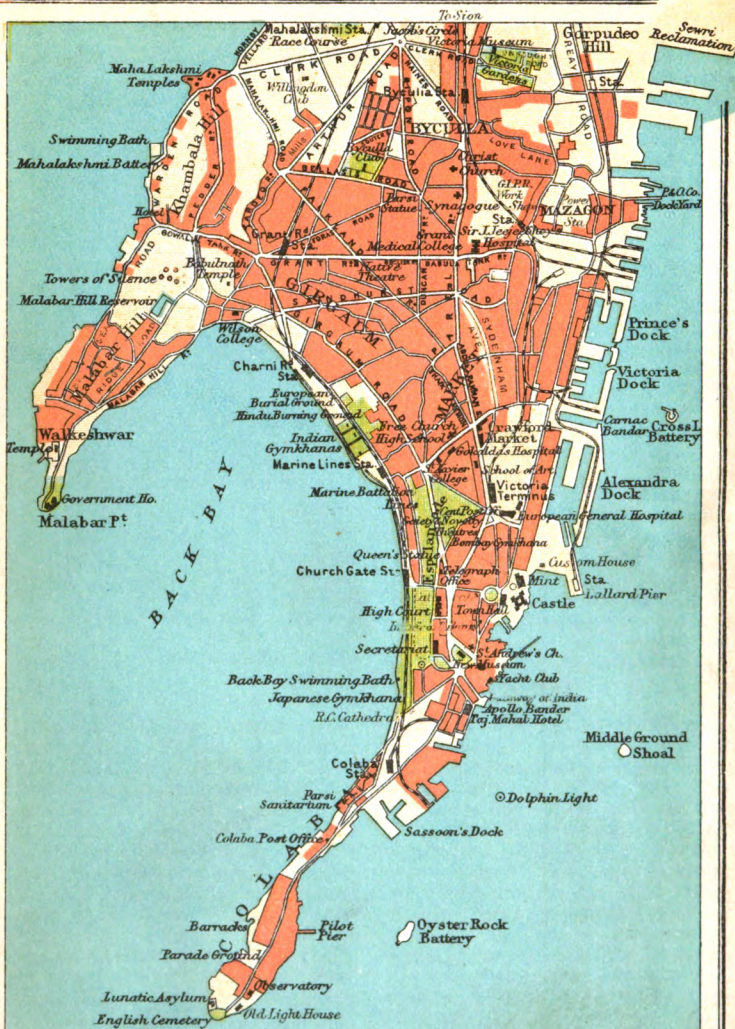
in the College. The Museum is full of curious things. The grounds cover 2 acres, and are made instructive by planting in them all kinds of useful trees and shrubs.

The **Northbrook Gardens**, in **Grant Road**, close by, were laid out in 1874.

A little to the S.E. of the Hospital are the Jail (now closed) and a European Workhouse. N. from the Hospital **Parel Road** leads past **Christ Church** and the **Byculla Station** to the old **Victoria Technical Institute** and the **Victoria and Albert Museum**, and finally to the old **Government House** at **Parel**. The old Institute occupied the building vacated in 1890 by the **Elphinstone College**, opposite the **Victoria Gardens**, which was built from a gift by **Sir Cowasjee Jehangir Readymoney**; it has been transferred to a new building near **Matunga**. It is under a Principal, assisted by eight professors, and is intended to provide a training in Art and Science in their application to industrial and other purposes.

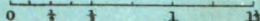
The **Victoria and Albert Museum** is a handsome building, standing in the gardens about 100 yds. back from the road. Until 1857 the collection, which is not an important one—except for the prints, maps, photographs, etc., illustrating the history of Bombay, which are to be seen in the "Old Bombay" rooms—was kept in the **Fort Barracks**, but, on **Sir G. Birdwood** being appointed Curator by **Lord Elphinstone**, he raised a subscription of a lakh for building this Museum. **Sir B. Frere** laid the first stone in 1862, and Government completed the building in 1871. The **Clock Tower** in front of it was erected by **Sir Albert Sassoon**, who also presented the fine statue of the **Prince Consort**, by **Noble**. The **Victoria Gardens**, in which the Museum stands, have an area of 34 acres, and are prettily





BOMBAY

Scale of Miles



laid out. To the right of the S. entrance to them is the stone elephant which gave the island of Elephanta its name; and on the E. side of them are a Menagerie and Deer Park. The band plays here twice a-week, and over two millions visit the Gardens yearly, one million visiting the Museum.

Parel Road continues from here past the Veterinary College, built on a site given by Sir Dinshaw Maneckjee Petit, to the **Old Government House**. The building occupies the site of the Hindu temple of Parali Vajjnath, from which the locality takes its name. In 1673 the Jesuits had a church and convent here; the latter was taken over in 1719 by Governor Boone, who used it as a country house. The first Governor who lived here permanently was William Hornby, between 1771 and 1780; and the right and left wings were added by Mountstuart Elphinstone (1819-1827). In 1885 Lady Fergusson, the wife of the then Governor, died here of cholera and the place was abandoned. It remained vacant until 1897, when it was utilised as a plague hospital. Two years later, Mr W. M. Haffkine opened a Plague Research Laboratory in the building. This became the Bombay Bacteriological Laboratory in 1906, and it has been known as the **Haffkine Institute** since 1925. Under this name it is used as a laboratory for Bacterial Research, the study of Tropical Medicine, and the preparation of plague vaccine. Visitors are permitted occasionally to see the interesting process of extracting venom from snakes and of making antidotes to poisoning from snake-bite. A Pasteur Institute has also lately been established here. The public rooms were in the centre facing the W. The drawing-room or ballroom, above the dining-room, occupied the place of the old Portuguese chapel. In addition to these two

Institutes, a fine range of buildings has been erected in the grounds and in the immediate neighbourhood. The King Edward Memorial Hospital, the Sunder Das Medical School, the Wadia Maternity Home, and the Wadia Hospital for Children, form one of the largest and most complete medical treatment centres in the East.

There are large railway workshops at Parel; and spinning-mills as well as at Tardeo and Warli. The Receiving Station of the Tata Hydro-Electric Works is at Parel (p. 26).

The **European Cemetery**, at Sewri, E. of Parel, formerly a Botanical Garden, is a sheltered spot under Flagstaff Hill. The garden was turned into a cemetery about 1867.

2 m. N. of Parel is the Acworth Leper Asylum, near Matunga Village. The Sassoon Reformatory is situated near the Matunga Road Station of the B.B. and C.I. Railway.

The drive round the Back Bay to Malabar Hill, 180 ft. high, by Queen's Road and Malabar Hill Road, is extremely beautiful and interesting. Beyond the Marine Lines Station are an enclosed burning place of the Hindus, a disused Muhammadan burying-ground, and the Girgaon English and Scottish cemeteries (also closed). Farther on in Chowpatty (Chaupati) is the **Wilson College** (named after Rev. Dr J. Wilson, F.R.S., Oriental scholar and Scottish missionary), for the education of young men—a fine building, which cost a lakh and a half of rupees, and is one of the largest colleges for Indians in Western India. The staff consists of a Principal and nine professors.

The Chowpatty Bunder, which is one of the remaining relics of old Bombay, is to be replaced by a

sea-wall, which it is proposed to continue along the entire sweep of Back Bay as far as Colaba.

At about 3 m. from the Fort the road begins to ascend a spur of Malabar Hill. Near the top, on the left, are the entrance gates to the drive through the grounds (private) of **Government House at Malabar Point**, with a pleasant view across Back Bay to the city of Bombay on the farther side. Below, at the extreme point, there used to be a battery, which could sweep the sea approach. Not far off to the N. a large ship, the *Diamond*, was wrecked, and eighty passengers were drowned. Sir Evan Nepean (1812-19) was the first Governor to reside at Malabar Point. In 1819-20 Mr Elphinstone added a public breakfast-room and a detached sleeping bungalow on a small scale. In 1828 Sir John Malcolm gave up the Government House in the Fort and considerably enlarged the residence at Malabar Point. Since 1885, when Parel was abandoned, it has been the official headquarters of the Governor in Bombay. Close by is the picturesque temple of **Walkeswar**, the "Sand Lord," built c. 1000 A.D. Throngs of Hindus will be met coming from it, their foreheads newly coloured with the sectarian mark. Rama, on his way from Ajodhya (Oudh) to Lanka (p. lxiii) to recover his bride Sita, carried off by Ravana, halted here for the night. Lakshman provided his brother Rama with a Lingam from Benares every night. This night he failed to arrive in time, and Rama made for himself a Lingam of the sand at the spot. On the arrival of the Portuguese in after ages, this sprang into the sea from horror of the barbarians. There is a small but very picturesque tank here, adorned with flights of steps, surrounded by Brahmans' houses and shrines. When Rama thirsted here, he shot

an arrow into the earth, and forthwith appeared the *Vanatirtha*, "Arrow-Tank."

The drive from Malabar Point, and thence along the Nepean Sea Road by **Breach Candy**,¹ under the W. side of Cumballa (Khambala) Hill, is one of the most beautiful in the island, especially at evening. On these hills are situated the principal residences of the European community and many wealthy Indians, surrounded by small but bright gardens. On Cumballa Hill is the new Bomanji Dinshaw Petit Hospital for Parsis, built at a cost of 15 lakhs, and with a present endowment of 5 lakhs. At the N. end of Breach Candy are the Mahalakshmi Temple and Tank on the sea. Eastward from there (approached by Clerk Road) is the **Race-course** where races are held throughout the cold weather on Wednesdays and Saturdays, under the management of the Western India Turf Club. It has been considerably enlarged, and a new Park has been opened close by. Here also is situated the **Willingdon Sports Club**, with its Golf Course, and Polo and Cricket Grounds. In the centre of Malabar Hill, about 180 ft. above the sea, are the grounds of the Ladies' Gymkhana, and beyond them the **Hanging Gardens**, affording lovely views of the Back Bay and of the great line of grand buildings rising on the farther side of it, and of the harbour and islands and mountains beyond them.

Between the gardens is All Saints' Church, and beyond them and N. of the head of the curve of the bay are the **Five Parsi**

¹ Various derivations and meanings of this name have been put forward. Mr Edwardes (*Bombay City Gazetteer*, 1910) suggests it means "the beach at the mouth of the hollow or pass—that is to say, the hollow between Cumballa ridge on the north and the Malabar ridge on the south." Candy = khand or pass.

Towers of Silence. In order to see them, permission must be obtained from the Secretary to the Parsi Panchayat, 209 Hornby Road. Strict compliance with the regulations is required. Sir Jamsetjee Jeejeebhoy, at his own expense, made the road which leads to the Towers on the N. side, and gave 100,000 sq. yds. of land on the N. and E. sides of the Towers. Within the gateway of an outer enclosure a flight of eighty steps mounts up to a gateway in an inner wall. From this point the visitor is accompanied by an official of the Panchayat, and turning to the right comes to a stone building, where, during funerals, prayer is offered. At a Parsi funeral the bier is carried up the steps by four Nasr Salars, or "Carriers of the Dead," and followed by two bearded men and a large number of Parsi mourners in white robes walking two and two in procession. The bearded men, who come next the bier, are the only persons who enter the tower. No other persons are permitted to do so on any account. On leaving the tower, after depositing the corpse on the grating within, the carriers proceed to the purifying place, where they wash and leave the clothes they have worn in a tower built for that express purpose. The general mourners have their clothes linked, in which there is a mystic meaning. There is a model of one of the Towers which was exhibited to the Prince of Wales (now King George V.) in 1905, and is produced to visitors.¹ The five towers are cylindrical in shape, and whitewashed. The largest (276 ft. round and 25 ft. high) cost £30,000, while the other four on an average cost £20,000 each. At 8 ft. from the ground is an aperture in the encircling wall about 5½ ft. square, to which the carriers of the dead ascend by a flight of steps. Inside

the plan of the building resembles a circular gridiron, gradually depressed towards the centre, in which is a well 5 ft. in diameter. Besides the circular wall which encloses this well there are two other circular walls between it and the outside, with footpaths running upon them; the spaces between them are divided into compartments by radiating walls from an imaginary centre. The bodies of adult males are laid in the outer series of compartments thus formed, the women in the middle series, and the children in that nearest the well. They are placed in these grooves quite naked, and in half an hour the flesh is so completely devoured by the numerous vultures that inhabit the trees around that nothing but the skeleton remains. This is left to bleach in sun and wind till it becomes perfectly dry. Then the carriers of the dead, gloved and with tongs, remove the bones from the grooves and cast them into the well. Here they crumble into dust. The dust in the well accumulates so slowly that in forty years it rose only 5 ft. This method of interment originates from the veneration the Parsis pay to the elements. Fire is too highly regarded by them to allow it to be polluted by burning the dead. Water is almost equally respected, and so is earth; hence this singular mode of interment has been devised. There is, however, another reason. Zartasht (Zoroaster) taught that rich and poor must meet in death; and this saying has been literally interpreted and carried out by the contrivance of the well. The surroundings of the Towers are arranged to foster calm meditation. The mourner at once arrives at the house of prayer, and around is a beautiful garden full of flowers and flowering shrubs, where, under the shade of fine trees, relatives of the deceased can sit and meditate; and the view to

¹ The first Tower of Silence in Bombay was erected in 1674 in the time of Aungier.

the W. and S. over the waters, and to the E. and N. over the harbour and the distant mountains beyond, is enchanting. Even the cypresses, as the Parsis themselves say, tapering upwards, point the way to heaven. At the S.E. foot of the hill is an Almshouse for decayed Parsis of both sexes, erected by the sons of the late Fardonjee Sorabjee Parekh. The drive, if a motor is employed, should be continued along the Hornby Vellard¹ to Warli, where the foreshore has been opened up by the Development Department, and through the beautiful Mahim woods of coco-nut and other palm-trees.

The Parsi Dharmshala, in the Gamdevi Road, intended for poor Persian Parsis, is passed on the approach to the Towers of Silence from the S. A similar dharmshala close by was erected by Sir Cowasjee Jehangir Readymoney, in memory of his grandfather in 1812.

The Tata Hydro-Electric Works.—Bombay is supplied with electric power and current from the Receiving Station of the Tata Hydro-Electric Works, which is at Parel. This scheme, which was inaugurated by Sir Dorab Tata, may be considered one of the most remarkable in the whole world. It is unique in so far as it has aimed at creating its own head of water by impounding the monsoon rainfall (often 500 in.) on the Ghats at Lonauli (p. 522), in extensive hydraulic works, comprising the three lakes formed at Shirawta, Walwhan, and Lonauli, with intercommunicating duct lines, forebay, etc. The dams of these three lakes are approxi-

mately 90, 70, and 34 ft. in height, with areas of 3000, 1700, and 720 acres respectively, all at 2000 ft. above sea-level. The foundation-stone of the first dam, which impounds the Lonauli Lake, was laid by Sir George Clarke (Lord Sydenham) on the 8th February 1911. The ducts lead the water to a forebay near the Duke's Nose, where it enters the Pipe Line, to take a plunge of 1740 ft. down to the Generating Station at Khopoli, where 40,000 horse-power is generated by five big turbines. The water utilised and released at Khopoli, if computed in cubic feet per second, equals the River Thames in volume. The power generated is conveyed 42 m. to the Parel Receiving Station by aerial transmission cables at a pressure of 100,000 volts, crossing several navigable creeks on lofty steel towers. From the Receiving Station the first instalment of 40,000 horse-power is distributed, among other consumers, to thirty-four mills. The introduction of electric power from this and other hydro-electric undertakings instituted by the house of Tata will, it is hoped, remove in course of time the smoke nuisance in Bombay.

SUBURBAN RAILWAY STATIONS.

The two principal ry. stations in Bombay are the **Victoria Terminus** (Great Indian Peninsula Ry.) and the **Bombay Baroda and Central India Ry.** station at **Colaba**, of which mention has already been made (p. 7). The local stations on the former line are Masjid, Sandhurst Road, Byculla, Chinchpokli, Currey Road, Parel, Dadar, Matunga, Sion and Kurla (10 m., Route 2). Those on the latter are: Church Gate, Marine Lines, Charni Road, Grant Road, Mahalakshmi, Lower Parel, Elphinstone Road, Dadar, Matunga Road, and Mahim (10 m.,

¹ The Hornby Vellard (Portuguese *Val-lado*, fence) was constructed by the Governor of that name (1771-1784) between Mahalakshmi and Warli to shut out the sea, which at high tide made the central portion of the island a swamp.

Route 10). The Harbour Branch runs from the Victoria Terminus (stns., Masjid, Sandhurst Road, Dockyard Road, Reay Road, Cotton Green, Sewri, Gowari) to Kurla, 10 m., where it connects with the G.I.P. main line.

MISSIONS.

The S.P.G., with a Church in Kamatipura Road, has four missionary clergy in the town, and a branch of the Ladies' Association working in the zenanas.

The C.M.S. (established in Bombay since 1820) has a Church in Dhanji Street, and large Schools for boys and girls at Girgaon.

The Mission Priests of St John the Evangelist (Cowley Fathers) serve the Church of St Peter's, Mazagon, and have a Mission House and Schools for boys and girls near it; also a native Mission and Orphanage in Babula Tank Road.

The "All Saints" Sisters (from Margaret Street) have been working in Bombay since 1878, and nurse in the following Hospitals: European General, Jamsetjee Jeejeebhoy, and Pestonji Kama. They have two High Schools for girls, in Elphinstone Circle and near St Peter's, Mazagon.

The American Presbyterian Board of Foreign Missions or Mahratta Mission, Byculla, has a considerable staff. The United Free Church of Scotland has a strong body of missionaries connected with the Wilson Mission College (p. 23), affiliated to the University.

The Roman Catholic Church is represented by the Jesuit Fathers as well as secular clergy, under an archbishop, who have eleven churches and eleven chapels in

the island, large schools and a college for boys (p. 18), as well as several convent schools and charitable institution for girls. The old Portuguese Padroado jurisdiction (p. 21) is also represented by a number of churches, chapels and secular clergy, under the Bishop of Damaun, who have care of the vast number of immigrants from Goa.

ROUND THE ISLAND OF SALSETTE

The environs of Bombay are gradually being opened up. The beach at Juhu (10 m. from the city), provides splendid bathing, and even nearer is Palli Hill, a favourite residential suburb, with a nine-hole golf course. Further afield the monsoon jungles of the Lake District of Vihar and Pawai attract the naturalist, the Caves of Kanheri, Jogeswar, and Borivli draw their weekly quota of pilgrims, and the old-world charm of the early Portuguese church of Bhayndar and the parochial village life of the "island" of Dharavi (road *via* Bhayndar) reveals an unsuspected element in modern Indian life, which is well worth a leisurely inspection.

A good motor road now encircles the whole island of Salsette (distance about 50 m.) Bombay is left by way of Parel Road and its continuation Kingsway. This will lead through Sion direct to Thana, between which place and Ghorbunder (D.B.), the Ulhas River breaks through the magnificent gorge of Gaimukh (the Cow's Mouth), the road closely following it. Bombay is re-entered by Bandra and the Mahim Causeway. From first to last (about 75 m. in all from the Apollo Bunder) the trip will be one of unflinching interest and contrasting beauties. The trip can be done comfortably in a day, but lunch should be carried in the car. A shorter round trip through the Lake District

(total distance about 45 m.) by a road which skirts Lake Pawai may be made. The suburban railway lines (see p. 26 for local stations) have now been electrified, but most places of interest in Salsette can be reached by motor from Bombay, and this will usually be found more convenient than proceeding by train.

EXCURSIONS IN THE VICINITY OF BOMBAY.

I. IN THE HARBOUR AND BY SEA.

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|---------------|---|
| 1. Elephanta. | 3. Down the Coast to Goa and Mangalore. |
| 2. Chaul. | |

II. BY THE B.B. AND C.I. RAILWAY.

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|---|---------------------|
| 1. Bandra. | 3. Kanheri Caves. |
| 2. Jogeswar Caves, Vesava and Aldeamar. | 4. Montpezir Caves. |
| | 5. Bhayndar. |
| | 6. Bassein. |

III. BY THE G.I.P. RAILWAY.

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|---|---------------------------------|
| 1. The Vihar Lake. | 5. Matheran. |
| 2. Mumbra. | 6. Karli Cave. |
| 3. Tansa Lake. | 7. Poona. |
| 4. The Thal an ¹ Bhor Ghats. | 8. Mahabaleshwar and Panchgani. |

I. IN THE HARBOUR AND BY SEA.

(1) **Elephanta** is a small island about 6 m. from the Fort of Bombay. Cook's launch¹ runs twice daily, and a coasting launch runs daily from Carnac Bunder. They make the passage in about 1 or 1½ hrs. A bunder-boat may be hired at from Rs.7 to Rs.10, in which case the length of the passage will depend on wind and tide. A cheap and convenient way of making the trip is to go by the Harbour Ferry from Carnac Bunder. It usually starts at 7.30 and is back by 12.15 the same morning, giving ample time to see the caves, which are reached by a walk of 1 m. from the old landing-place in the S.W. of the island. The boat will pass close to Butcher's Island, which

is 3 m. nearly due E. from Mazagon Dock. The island is entirely occupied by the Royal Engineering Staff, and the principal wireless installation is placed upon it. The view in this part of the harbour is fine. To the N. is the hill known as the Neat's Tongue, on Trombay Island, which is 1000 ft. above sea-level. The highest point of Elephanta is 568 ft. To the S. is the hill above Karanja, called Dronagiri—a mass of rock thrown down by Hanuman on his flight to Ceylon.

Elephanta is called by Indians *Gharapuri* ("the town of the rock," or "of purification," according to Dr Wilson), or *Garapuri* ("the town of excavations," according to Dr J. Stevenson). The caves are called *Lenen* (Lena), a word used throughout India and Ceylon for these excavations. Probably they were originally hermitages of Buddhist ascetics. The island is covered with low corinda bushes and Tal palms. It consists of two long hills, with a narrow valley between them. About 250 yards to the right of the old landing-place, at the S. end of the island on the rise of one of the hills, and not far from the ruins of an ancient city, was a mass of rock, cut into the shape of an elephant, from which the place derives its European name. In September 1814 its head and neck dropped off, and in 1864 the half shapeless mass was removed to the Victoria Gardens, where it was re-erected in 1912.

The modern landing-place, N.W. of the island, is not a very convenient one, as it consists of a rather slippery pier of separated concrete blocks. The caves are distant about ¼ m., and about 250 ft. above the sea, and are approached by easy steps, constructed in 1853 by an Indian merchant at a cost of Rs.12,000. There is a caretaker's bungalow at the entrance, where a fee of 4 annas is paid; tea

¹ Messrs T. Cook & Son's office is in Hornby Road.



can be obtained, and visitors can sit and rest. The date of the excavation of these caves¹ is now placed about the middle of the 8th century, slightly subsequent to the corresponding cave at Ellora (p. 80). The caves face the N., and are open also to the E. and W. The main hall was enclosed by two wide colonnades of six columns and two centre colonnades of four columns, the recesses on the N. and S. sides consisting of two aisles separated by two columns, the outer aisle being much shorter than the inner; the length of the central hall from the pillars at each end is 130 ft., and the breadth from the wall of the south recess to the pillars on the outer side of the north recess is just the same. Of the twenty-six columns, including the sets of two at each entrance to the cave, eight have fallen. The columns present some variety of shape and ornament: they have a square shaft rising about half the way up a fluted neck, and a capital of the shape of a squeezed cushion, bound in the middle; the height of the columns varies from 15 ft. to 17 ft.

The *Lingam Shrine*, at the W. end of the hall, stands 4 ft. above the floor of the cave. It is 19½ ft. square, with four doors facing different ways. At the outside of each entrance are two large figures representing *dwarpals* or door-keepers, who lean on dwarfs. The *Lingam*, a cylindrical stone 3 ft. high, the emblem of Siva, is worshipped on great occasions by crowds of devotees.

On entering the caves the most striking feature is the Colossal *Three-headed Bust, or Trimurti*, in the S. wall, facing the N. entrance. It is 19 ft. in height, and the faces are between 4 and 5 ft. long. It is the representation of Siva, who is the leading character in all the groups of the cave. The front face is Siva in

the character of Brahma, the creator; the E. face (spectator's left) is Siva in the character of Rudra, the destroyer; and the W. face (spectator's right) is considered to be Siva in the character of Vishnu, the preserver, holding a lotus flower in his hand. On either side of the recess is a pilaster with a gigantic *dwarpal* in front of it.

The *Arddhanariswar, or androgynous Divinity*, in the first compartment to the E. of the central figure (spectator's left), represents Siva. It is 16 ft. 9 in. high. The right half of the figure is intended to be that of a male, and the left that of a female, and thus to represent Siva as uniting the two sexes in his one person. The bull on which two of the hands of the figure lean, known as his *vahana*, or vehicle, is called Nandi, a constant attendant on Siva. Brahma, on his lotus throne, supported by five swans, and with his four faces, is exhibited on the right of the figure. On the left, Vishnu is seen riding on what is now a headless Garuda, a fabulous creature, half man, half eagle. Above and in the background are found a number of inferior gods and sages of the Hindus, among them Indra, the Rain-god, mounted on an elephant.

In the compartment to the W. of the *Trimurti* are two gigantic figures of *Siva* and *Parvati*, the former 16 ft. high, the latter 12 ft. 4 in. Siva has a high cap, on which is a crescent over each temple. From the top of it rises a cup or shell, on which is a three-headed female figure, with broken arms, representing the Ganga proper, the Jumna, and Saraswati, which three streams unite at Prayag, or Allahabad, the sacred meeting-place of the three plaited locks, and form the Ganges. According to a well-known Hindu legend, the Ganges flowed from the hair of Siva. The god is standing, and has four arms, of

¹ See *Cave Temples of India* (London, 1880), by Fergusson and Burgess.

which the outer left rests on the head of a dwarf, with curly or matted hair. In the dwarf's right hand is a cobra, in his left a *chauri* (fly-whisk); from his neck hangs a necklace, with a tortoise ornament. On Siva's right are Brahma, on his lotus seat, borne by five swans, with four hands, bearing the lotus, roll of the Vedas, and butter-dish, and Indra on his elephant.

The *Marriage of Siva and Parvati* is a sculptured group (greatly damaged) in the S. wall of the W. aisle. The position of Parvati on the right of Siva shows that she is his bride; for to stand on the right of her husband, and to eat with him, are privileges rarely vouchsafed to a Hindu wife, save on her wedding-day. In the corner, at the right of Parvati, is Brahma, known by his three visible faces, sitting and reading, as the priest of the gods, the sacred texts suited to the marriage ceremony. Above, on Siva's left, is Vishnu. Among the attendants on the right of Parvati is one bearing a water-pot for the ceremony. This is probably Chandra, the moon-god. Behind the bashful goddess is a male figure, probably her father, Himalaya, who is pushing her forward.

Opposite this, in the N.W. corner of the hall, is a relief of *Kapalabhrī* or *Bhairava*, with skull and cobra on head and rosary of skulls round neck; two of his eight hands are devoted to the slaughter of a human being, and a third holds up a body for slaughter. At the W. end of the North aisle, by which the cave is entered, is a relief of *Siva performing the Tandava dance*; on his left is Parvati, and above is a very perfect Ganesh. Opposite this, at the E. end of the aisle, is a representation of *Siva as Lakulisa*, which so much resembles Buddha that the early describers of the cave before Erskine thought it to be that personage. The figure has the remains of two arms,

which appear to have rested in his lap. It is seated on a lotus, the stalk of which is supported by two figures below. In the aisle behind the East entrance again are two reliefs on the N. and S. ends. The first of these represents *Ravana, the demon king of Lanka*, or Ceylon, attempting to remove Kailas, the heavenly hill of Siva, to his own kingdom, in order that he may have his tutelary deity always with him, for Ravana was ever a worshipper of Siva. Ravana has ten heads and twenty arms, and is with his back to the spectator. Siva is seen in Kailas, with Parvati on his right, and votaries and Rishis in the background. The legend runs that Ravana shook Kailas so much that Parvati was alarmed, whereupon Siva pressed down the hill with one of his toes on the head of Ravana, who remained immovable for 10,000 years.

The last relief opposite this shows *Siva and Parvati* seated together, with groups of male and female inferior divinities showering down flowers from above. The rock is cut into various shapes to represent the peaks of Kailas, Siva's heaven. Behind Siva and Parvati is a female figure carrying a child on her hip, from which it was supposed that the sculpture represents the birth of Skanda, the war-god; the later view is that the scene represents Parvati in a temper.

Beyond the main hall on the E. side is the *East Wing*, consisting of an open court 55 ft. wide, in the centre of which was a circular platform, probably for a Nandi. On the S. side of the court is a temple on a high terrace, reached by steps with lions at the top of them. The portico of the temple has a chamber at each end, that on the E. end with figures of Siva, Vishnu and Brahma, and of the seven great goddesses or divine mothers (p. 80). The shrine of the

temple measures 14 by 16 ft., and has an altar and lingam inside it. The *West Wing* of the cave has also an open court with a large cistern on the S. side, and on the W. side a small open chapel with a lingam in it.

Round the hill, a little to the S., are two other excavations fronting the E. These are also Lingam shrines, with *dwarpals* sculptured outside.

(2) **Chaul.**—A group of ancient Portuguese and Moorish forts at the mouth of a creek just outside the harbour. The steamer sails every day in the fair season (October-May), and the stopping place is called Revdanda. One night out is sufficient, but better two. On the south side of the creek there is a Janjira State bungalow, for which leave has to be asked from the Political Agent, but it is scantily furnished, and food, servants and bedding must be taken. It is possible to camp out in a tent, if preferred, on the summit of Korlai hill; a lovely fort, with panoramic view. On the N. side of the creek is the old Portuguese city-fort of Chaul, similar but second to Bassein, with its walls and groups of churches in ruins overgrown by a dense grove of palms. Chaul was taken by the Portuguese in 1522 and made subordinate to Bassein, and was lost to the Mahrattas in 1739. On the overthrow of the Peshwa Baji Rao in 1818, it passed with the surrounding country to the British. Not a trace remains of the once famous city and emporium. Ralph Fitch mentions the "great trade" of Chaul in 1584, and Pyrard de Laval describes it about 1663 as differing from Bassein and Daman "in being extremely rich and abounding in valuable goods." The village of Korlai contains an old Portuguese church and a Christian population of fishermen, who retain the old Portuguese customs.

(3) **Down the Coast to Goa and Mangalore.**—The steamers (twin-screw and oil-driven) of the Bombay Steam Navigation Company ("Shepherd Company") of which Messrs Killick, Nixon and Co. (120 Frere Road) are the managing agents, sail from the Alexandra Dock, Ferry Wharf, for Panjim (Nova Goa) daily, carrying the mails, and calling at Ratnagiri and Vijayadrug. The trip can be made during the week-end (leave Bombay 10 a.m. Sat., arrive Panjim 6 a.m. Sun., depart 10.0 a.m., arrive Bombay Mon. 6.0 a.m.). There is first-class saloon accommodation for eight passengers; and a catering contractor on board supplies full messing at Rs.6 per day. (For Goa, see Route 27, p. 552.) The Company also maintains a weekly service of steamers to Mangalore (p. 653), which leave Bombay on Tuesdays at 10.30 a.m. and arrive at Mangalore on Thursdays at 6.0 a.m. (Return; Depart Thursday, 10 a.m. Arrive Bombay, Saturday, 6.30 a.m.) The steamers call *en route* at Vengurla, Mormugão, and Karwar.

II. BY THE B.B. AND C.I. RAILWAY.

(1) **Bandra** station (11 m. from Bombay (Colaba) on the sea-shore, is a favourite residence for persons who have daily business in Bombay. Portuguese traditions are still strong, though none of the original buildings have survived. The cathedral-like chapel of *Mount Mary* was rebuilt a few years ago. *Juhu*, a fine bathing-ground, with a wide stretch of beach, lies to the left of Villa Parle (Palli Hill), 3 m. from Bandra.

(2) The **Jogeswar Cave** lies 2 m. N.E. of Andheri Station (15 m.) on the B.B. C.I. Ry., and can be reached by tonga. Dr Burgess attributed this Brahman cave to the latter half of the 8th century,

perhaps a quarter of a century after the Elephanta Cave, and half a century after the Sitaki Nāhani at Ellora (p. 82). Like the former, it has extensive wings to the central hall, which has a shrine 24 ft. square in the middle, with four doors and a large lingam. The veranda on the S. side is 120 ft. long, and has ten columns of the Elephanta pattern, while twenty more such pillars are arranged in a square in the hall. Measured all over, the cave is the largest Brahmanical excavation known after Kailāsa (p. 81).

From Andheri Station, 2 m. W., is the seaside village of Vesava, used as a holiday resort for Bombay. There are many private bungalows, but no other accommodation. A day's trip should include a sea bathe and a visit across the creek to Aldeamar Fort, first a Portuguese then a Mahratta stronghold.

(3) **Cave Temples of Kanheri (Kennery).**—These caves are all excavated in the face of a single hill in the centre of the island of Salsette. B.B. and C.I. Ry. to Borivli, stn., 23 m. from Bombay (good clean waiting-room); thence 5 m. to the caves by a rough country road, on which carts ply and which runs to within 1 m. of them. There is a D.B. at Thana (see Route 2): and from that place a cart or light vehicle can proceed 4 m. towards the Tulsi Lake (p. 35) and then 2 m. to the caves by a narrow path, which winds along the sides of rocks, but is quite possible for a horseman. This route, however, is difficult and is not recommended. There are in all one hundred and nine Buddhist caves. It seems probable that the greater part of them were executed by a colony of Buddhists, "who may have taken refuge here after being expelled from the continent, and who tried to reproduce the lost Karli in their insular retreat." They

date from the end of the 2nd century A.D. to about the middle of the 9th, or possibly a little later. The great *Chaitya* is one of the earliest here; those on each side may be two centuries later: the latest is probably the unfinished one, which is the first the traveller approaches by the usual route, and which dates about the 9th or 10th century A.D., or is even still more recent. However this may be, it is at least certain that, to use Heber's words, "the beautiful situation of these caves, their elaborate carving, and their marked connection with Buddha and his religion, render them every way remarkable."

Most of the surrounding hills are covered with jungle, but the one in which the caves are is nearly bare, its summit being formed by one large rounded mass of compact rock, under which a softer stratum has been denuded by the rains, forming natural caves, which, slightly improved by art, were appropriated as cells. The path runs in a N. direction up to the ravine, lying E. and W., round which the caves are excavated on six ledges in the mountain side connected by flights of steps. Shortly before the end of the ravine is reached, a steep ascent leads up to a platform facing W., where the Great Chaitya Cave (No. 3) and two other caves are situated, and whence steps in the rock lead down to the ravine.

Cave No. 3, entered through a forecourt and a veranda, is a copy of that at Karli (p. 524), though much inferior, and probably dates from the 6th century. It is 86 ft. long and 40 ft. wide, and has a colonnade of thirty-four pillars, which encircles the dagoba, standing 16 ft. high, at the back. A number of the pillars have bases and capitals carved with elephants, dagobas, trees, worship of sacred feet, etc. At the ends of the great veranda

are two later figures of Buddha, 21 ft. high, and over the door is the great arched window, which forms one of the principal characteristics of these structures. In front of the veranda are two pillars, and on the screen of the back wall are Buddhist carvings. In the forecourt are two attached pillars, on which are four lions and three squat figures. On the left of the court is a round cell with a dagoba, and on the right, at the end of a long excavation (No. 2), are three ruined dagobas, with a Buddhist litany (p. 70) on the rock round them.

At a distance of 150 yds. up the ravine, N.W. of the Chaitya Cave, is the Darbar of the Maharaja Cave (No. 10), which was a dharmasala, or hall of assembly, and not an ordinary vihara.¹ It is 73 ft. \times 32 ft. in size, and has two stone benches running down its longer axis and some cells on the left and back walls. The veranda, which is approached by three flights of steps, has eight columns along the front of it. Nos. 11, 14, and 21, farther up the same (left) side of the ravine, may also be visited. The first has a small court in front of it, the second has some traces of painting, and the third has columns of the Elephanta type, a Buddhist litany, and a figure of Padmapani, crowned by ten cobra-heads, in a recess on the right of the porch. Above No. 10 on the hill-side is No. 35, a vihara 40 ft. \times 45 ft., with benches round it, and four octagonal columns in the veranda; on the walls are reliefs of Buddha seated upon a lotus, of a disciple spreading his cloak for him to walk upon, and of another litany. N.W. from these are caves 56 and 66. From the front of the former is a fine view of the sea; in the latter are some fine sculptures and another litany. Some 400 yards to the south, and beyond the Chaitya Cave, is a

terrace with monuments over the ashes of Buddhist monks. The number of cisterns and small tanks round the caves and the flights of steps connecting them are remarkable.

(4) *Montpezir Caves (Mandapeshwar)*.—B.B. and C.I. Railway to Borivli Station, 23 m., thence 1 m. by tonga. At the caves are a ruined Portuguese church and Franciscan monastery with a cross close by. Round the N.E. corner of the church are three Brahman caves hewn out of the rock, dating from the 8th century. The cave on the E. is 5 ft. 8 in. \times 21 ft. Adjoining this cave to the W. is a stone basin for water, of which there is a good supply, said never to fail, and this may be one reason why the Portuguese built here. The next cave is 27 ft. 3 in. \times 14 ft. 9 in. In the W. wall is a group of 25 Gana (celestial dwarfs) figures very much mutilated, and a four-armed Siva. In the corner of the outside wall is half a teak door of the church, with two saints carved on it. The third or W. cave was a vihara (monastery hall) cave in which ten or twelve hermits lived, but was converted into a chapel in 1555 A.D. In the N. part of the E. wall, upside down, is the stone originally over the entrance door, inscribed with the date 1555. At the N.W. are pillared partitions leading to cells, and on the W. side are two pillars and four pillars about 12 ft. high, with tapering shafts and angular capitals. The interior measurement of the *mandapam*, or hall, is 51 ft. \times 21 ft. The conversion of the cave into a church was effected by the building of a wall in front of it and by screening off the Saivite sculptures or covering them with plaster. This is one of the very few instances of the transformation of a Brahmanical cave-shrine into a Christian place of worship. The King of Portugal, John III.,

¹ The Mahanwada Cave at Ellora (p. 78) is another of the same class.

diverted to the church (which was dedicated to N. D. de la Misericordia) the revenues of the temple, which sufficed to support fifty jogis (ascetics) and also built the monastery. To the S., on an eminence, is a round tower (40 ft. high), which the priest calls a Calvarium, now surmounted by a statue of Jesus Christ. An Orphanage has been built close by, and the old church has recently been restored. There is a good view from the top over the plain.

(5) **Bhayndar** Station, 29 m. from Bombay, is on the S. edge of the Bassein creek, which divides Salsette from the mainland. The railway here crosses the river by a very long bridge. On the right, and for some miles up the stream, the scenery is most beautiful—the Kamandrug Hills and Ghorbunder, with the quiet water between them, forming a tropical landscape as charming as can be seen anywhere in India.

(6) **Bassein**.—The chief stronghold of the Portuguese from 1534 to 1739. A fort-city, with walls intact, containing many ruined churches and palaces. It is reached by a road, 7 m., from Bassein Road station (D.B. 34 m. from Bombay). Motors and tongas available. By starting early in the morning (say 6 o'clock) and returning by a train at about 4.30 p.m., a pleasant visit can be made in one day. Food must be taken. Soda-water is obtainable in the village, but visitors will be wiser to bring their own supply. Shelter and rest can be had under cover of one of the churches. The tonga or motor should not be paid on arrival, but ordered to return at 2 o'clock for the homeward journey. The principal churches are those of the Franciscans, Dominicans, Jesuits and Augustinians, besides the *Matriz*, or mother church of St Joseph, popularly called the Cathe-

dral. The survey should be completed by a walk round the seaward side of the walls.

The first notice of Bassein is in 1532, when the Portuguese ravaged the neighbourhood. In 1534 they took Daman,¹ which they still hold, and obliged Sultan Bahadur, of Gujarat, then hard pressed by the Emperor Humayun, to cede Bassein in perpetuity. "For more than 200 years Bassein remained in the hands of the Portuguese, and during this time it rose to such prosperity that the city came to be called the Court of the North, and its nobles were proverbial for their wealth and magnificence. With plentiful supplies of both timber and stone, Bassein was adorned by many noble buildings, including a cathedral, five convents, thirteen churches, and an asylum for orphans. The dwellings of the Hidalgos, or aristocracy, who alone were allowed to live within the city walls, are described (1675) as stately buildings" (Hunter). Fryer wrote of the town in 1675: "Here were stately dwellings graced with covered balconies and large windows, two storeys high, with panes of oyster-shell, which is the usual glazing amongst them (the Portuguese) in India, or else latticed." On the 17th February 1739 the Mahrattas invested Bassein, and the town surrendered on the 16th of May after a most desperate resistance, in which the commandant, Silveira de Menezes, was killed, and 800 of the garrison were killed and wounded, the Mahrattas' loss being upwards of 5000. On the 13th of November 1780 General Goddard arrived before Bassein, and on the 28th his first battery opened against it. He had very powerful artillery, and one battery of twenty mortars, which shortly after opened at the distance of 500 yds., and did great execution.

¹ See p. 101. The poet Camoens distinguished himself on this occasion.

The place surrendered on the 11th December, on which day Colonel Hartley, with a covering army of 2000 men, defeated the Mahrattas' relieving army of upwards of 24,000 men, and killed its distinguished General, Ramchandra Ganesh.

The *Fort*, with the ruins, stands on the Bassein creek, a little away from the sea; it is now entered from the N.

The Old Town, surrounded by walls and ramparts, contains the ruins of the Cathedral of St Joseph and other churches built by Roman Catholic missionaries in the 14th and 15th centuries. Several inscriptions remain, the earliest dated 1536. A guide (if procurable) would be useful to point out the various ruins. Among them are the Church of St Anthony, the Jesuits' church, and the churches and convents of the Augustinians and Franciscans.

3½ N.W. from Bassein Road stn. is **Sopāra**, which is now an insignificant place, but which, up to the beginning of the 14th century, was the principal port of the Konkan. It has been identified by some writers with Solomon's Ophir, on the ground that "Ophir" appears as "Sophir" in the Septuagint version of the Bible. Some support of the theory may be found in the fact that the place is also locally known as "Opāra." One of the Rock Edicts of Asoka (Introd., p. lxxxi) was found here.

III. BY THE G.I.P. RAILWAY.

(1) The **Vehar Lake** can be reached by tonga from Kurla stn. (10 m.) on the G.I.P. Ry., and is close to Bhandup stn. (17 m.) on the same line. But the most convenient method of approach is by motor from Bombay, either by Sion Causeway and Kurla, or by Mahim Causeway and Andheri. The road from Bombay to Thana (if the route *viâ* Kurla is chosen)

is left soon after Kurla. If the visitor proceeds *viâ* Mahim and Bandra, he takes a cross road at Andheri. The lake covers 1400 acres, and measures $2 \times 1\frac{1}{4}$ m.; it was made by Mr Conybeare, C.E., by damming up the Garpur river. It cost £373,650 with the connecting pipes, and can supply 8,000,000 gallons of water a-day. The embankment is 30 ft. broad and 30 ft. above the water. The water is 75 ft. deep, of which 50 ft. are available for the supply of Bombay and 25 ft. are kept for *settling*. There are many crocodiles in the lake: fish life is not very abundant. Tigers are now unknown, but many have been killed here. One, shot by Mr Robertson, C.S., had killed sixteen persons. **Pawai Lake**, lying below Vehar, was formed by the Municipality in 1890. Its water is now used to supplement the main supply.

The **Tulsi Lake**, which lies 2 m. to the N., was formed in 1872, at a cost of £40,000, and water is carried thence to the top of Malabar Hill; 2 m. N. again are the Kanheri Caves.

(2) **Mumbra** (station 25 m. from Bombay on the G.I.P. line to Poona) is a favourite week-end resort and can be recommended as a most attractive spot. There is a hotel and a sailing club. The Mumbra Creek is a fine stretch of water, and the background of wooded hills completes a charming picture. The scenery on the Vihas river between Mumbra and Bassein Creek has been compared to the Rhine from Mainz to Cologne.

(3) The **Tansa Water Supply** (G.I.P. Railway to Atgaon Station, 59 m., D.B.).—The increase in the population of Bombay led the Corporation to construct a still larger reservoir on the Tansa River, about 60 m. N.E. of Bombay, which was formally opened by H.E. the Viceroy, Lord Lans-

downe, in 1892. The Dam, which encloses the valley of the Tansa River, completed 1891, is one of the largest pieces of masonry of modern times. It is of a uniform height of 118 ft., and is 2 m. long, 103 ft. thick at the base, and 24 ft. at the top, where a flagged road runs along it. The lake which was originally 8 sq. m. in area, and is capable of supplying 33,000,000 gallons daily has been greatly enlarged, and huge mains, 6 ft. in diameter, have been laid down, quite independent of the old mains.

The hot wells of Vajrabai, or Vajreshwari, 12 m. N. of Bhiwandi (Bundy) near the bed of the Tansa river in the village of Wadowli (Vadavli), were very popular in the 18th century and largely used by Europeans. James Forbes in his *Oriental Memoirs* describes them as consisting of a small cistern with water at a temperature of 120° Fahr. Except that it contained no iron, the water tasted like that of Bath. With the discovery of Mahabaleshwar (p. 544) in 1826-29, the wells ceased to be frequented by Europeans, but are still popular with Indians.

(4) **The Thal and Bhore Ghats.**—

The ascent or descent of these Ghats passes through some of the prettiest scenery in all India (see pp. 38 and 522); and those who do not intend to leave or reach Bombay by railway trains which pass them by day, should make a point of visiting them separately. The **Thal Ghats** can be seen by a railway trip as far as Igatpuri, 85 m. from Bombay, on the G.I.P. route to Itarsi (Route 2, p. 39); it is possible to return the same day after taking refreshment at Igatpuri Station. The **Bhore Ghats**, which are passed on the G.I.P. route to Poona and Madras (Route 26, p. 521), are even finer than the Thal Ghats, and should not be missed. At **Khandala** (p. 522), 78 m. from

Bombay, some of the most beautiful scenery in India can be enjoyed, especially in September. A visit to the Karli Cave can be combined with a trip to Khandala; but this is best reached from Lonauli (see below). It should be ascertained whether the Calcutta, Madras and Punjab mail trains pass, according to the timing in force, up or down the Ghats in the daytime.

There are excellent metalled roads up both Ghats and motor cars find no difficulty in making the ascents. The main road to the Thal Ghat goes from Thana by way of Mumbra Creek and Panvel (43 m.) to Khopoli (65 m. from Bombay) and Khandala (71 m.). There are a few hairpin bends, but the majority of the turnings are on the right. Hotel and petrol supply at Khandala. For the Bhore Ghat the best route is to proceed about 8 m. along the road to Panvel and then to take the Kalyan road (which turns off to the left) to Bhiwandi (6 m. from Kalyan). Here the main road to Igatpuri and Nasik is met.

(5) **Matheran**, by rail to Neral stn. (G.I.P. Ry.), 54 m. from Bombay, thence by steam tramway, 13 m. (see Route 26, p. 521). Fine views of Bombay.

(6) **Karli Cave**, best reached from Lonauli station (R.), 80 m. from Bombay (see Route 26, p. 522).

(7) **Poona** by rail (G.I.P. Ry.), 119 m. from Bombay (see Route 26, p. 528). The ancient Mahratta capital.

(8) **Mahabaleshwar and Panchgani**, by rail (69 m.) from Poona to Wathar Station; thence by motor to (28 m.) Panchgani and (40 m.) Mahabaleshwar (see Route 27, p. 544).

ROUTE 2.

BOMBAY TO CALCUTTA by Kalyan, Nasik, Manmar, Jalgaon (Caves of Ajanta), Bhusawal, Khandwa, Itarsi, Piparia (for Pachmarhi), Jubbulpore (for the Marble Rocks), Katni, Manikpur, Allahabad, Mughal-sarai (Benares), and thence to Asansol and Howrah *via* (a) E.I.R. Grand Chord, by Gaya (Buddh Gaya) and Isri (for Parasnath) and (b) E.I.R. main line by Arrah and Patna.

Rail 1349 m. (G.I.P.R. and E.I.R.); mail train $4\frac{1}{2}$ hours to Calcutta.

For service to N. India by this route, see Route 9, p. 163.

Fares¹—1st class, Rs.123-1-6; 2nd class, Rs.61-9-6; 3rd class, by the mail trains, Rs.18-1-6. Luggage—free, 120 lb., 60 lb., and 30 lb.; halve those figures to obtain seers, the Indian standard of weight. The 85 m. between Bombay and Igatpuri are by far the most picturesque on the whole line between the Western and Eastern capitals. By the Nagpur and Punjab mails passengers now pass over this portion of the line in daylight; but the Calcutta mail traverses it at night.

On leaving Bombay, between Sion and Kurla, the railway passes on a causeway from the island of Bombay to the larger island of Salsette.

10 m. Kurla station. Close by (right) are the once famous cotton-mills, the first started. The Vihar Lake can be visited by tonga from here. The first electric railway in India was constructed from Bombay to Kurla, for suburban traffic, in 1925.

¹ The railway time-tables should be consulted, as fares are revised from time to time. Messrs Thos. Cook & Son issue tickets available sixty days, allowing break of journey at any station *en route*.

17 m. Bhandup station for the N. shore of the Vihar Lake (p. 35).

21 m. Thana station, D.B., and a *dharmsala* for Indians. An early Portuguese settlement, commanding the most frequented passage from the mainland to the island of Salsette. Marco Polo (1298 A.D.) says: "Tana is a great kingdom, lying towards the West. . . . There is much traffic here, and many ships and merchants frequent the place." In 1320 four Christian companions of Friar Odoricus suffered martyrdom here. Friar Jordanus narrates that he baptized about ninety persons ten days' journey from Thana, besides thirty-five who were baptized between Thana and Sopara.

The country round Thana was highly cultivated, and was studded with mansions of the Portuguese, when, in 1737, it was wrested from them by the Mahrattas. In 1774 the Portuguese sent a formidable armament from Europe for the avowed object of recovering their lost possessions. The Government of Bombay determined to anticipate their enterprise, and to seize upon the island for the English. A force was prepared under General Robert Gordon, and Thana was taken after a siege of three days. On 6th March 1775 the Peshwa Raghoba, by the Treaty of Surat, ceded the island of Salsette in perpetuity. In 1816 Trimbakji Danglia, the celebrated Minister of Baji Rao II., the last Peshwa, effected his escape from the fort of Thana, though guarded by a strong body of European soldiers. The difficulties of this escape were greatly exaggerated all over the Mahratta country, and it was compared to that of Sivaji from the power of Aurangzeb. The principal agent in this exploit was a Mahratta horse-keeper in the service of one of the British officers of the garrison, who, passing and repassing Trimbakji's

cell, as if to exercise his master's horse, sang the information he wished to convey in a careless manner, which disarmed suspicion. Bishop Heber, who had seen Trimbakji in his prison in the fort of Chunar, was much interested in this escape, and writes :—

“ The groom's singing was made up of verses like the following—

“ ‘ Behind the bush the bowmen hide,
The horse beneath the tree ;
Where shall I find a knight will ride
The jungle paths with me ?

“ ‘ There are five-and-fifty coursers there,
And four-and-fifty men ;
When the fifty-fifth shall mount his steed,
The Deccan thrives again.’ ”

The **English Church** was being built when Bishop Heber arrived, and on 10th July 1825 was consecrated by him. In the 16th century the *Silk Industry* here employed about six thousand persons. It is now believed to be confined to one family.

34 m. **Kalyan** junction station (R.). Here the line to Madras through Poona and Raichur branches off S.E. (Route 26). This is a very ancient town, and was once the capital of the Chalukyas. In 1780, the Mahrattas having cut off the supplies from Bombay and Salsette, the British Government determined to occupy the Konkan opposite Thana as far as the Ghats. Accordingly several posts were seized, and Kalyan amongst them ; and here Captain Richard Campbell was placed with a garrison. Nana Farnavis forthwith assembled a large force to recover Kalyan, on which he set a high value, and attacked the English advanced post at the Ghats, and killed or made prisoners the whole detachment. He then compelled Ensign Fyfe, the only surviving officer, to write to Captain Campbell that, unless he surrendered, he would put all his prisoners, twenty-six in number, to death, storm Kalyan,

and put all the garrison to the sword. To this Campbell replied that “ the Nana was welcome to the town if he could take it.” After a spirited defence he was relieved by Colonel Hartley, on the 24th May, just as the Mahrattas were about to storm. The remains of buildings round Kalyan are very extensive ; and Fryer, who visited the place in 1673, “ gazed with astonishment on ruins of stately fabrics, and many traces of departed magnificence.”

Between Kalyan and Igatpuri the railway ascends from the Konkan to the Deccan plateau by the mountain pass known as the **Thal Ghat**.

The ascent of the Thal Ghat is at all seasons interesting ; but it is most beautiful in September owing to the wild flowers. The leaves are then bright green, and the country below the Ghats is all streams, pools, and inundations, and the Ghats themselves all cascades and torrents. 50 m. **Vasind** (178 ft. above sea-level). The incline up the Thal Ghat commences here.

59 m. **Atgaon** station, for Tansa (p. 35).

75 m. **Kasara** station (R.), 930 ft. above the sea. Here a special engine is attached, and the steeper ascent of the Ghat begins. In 9½ m. the line ascends 1050 ft. higher from Kasara to Igatpuri. There are ten tunnels of an aggregate length of 2281 yards, five viaducts and eleven bridges.

At 79½ m. was the **Reversing Station** (the **Ehegdon Viaduct**, said to be the highest in India, 190 ft. above the valley), and the ascent terminated at 85 m., **Igatpuri** D.B. (R.), where the special engine and brakes were removed, but a new double track, which avoids the necessity of reversing, was brought into use in 1917.

Igatpuri, properly Wigatpura, "the town of difficulties," so-called on account of the precipitous road that preceded the railway, is a pleasant sanatorium, 2000 ft. above the sea, and summer resort of Europeans from Bombay. There are several European bungalows belonging to railway officials. Half a mile from the station a picturesque lake supplies Igatpuri and Kasara with excellent water. The line passes through a comparatively level country, with low mountains on either side, but to the south can be seen the peak of Kalsubai (5427 ft.), the highest mountain in the Presidency, and Sivaji's hill forts of Alang, Bitan-gad, Aundha, and Arr.

To the S. of the line is the lake formed by the dam on the Darna river, an important irrigation work finished in 1912. The dam itself is 2 m. from Aswali station (101 m.).

113 m. Deolali station. A halting-place for troops arriving from or proceeding to Europe. There are large barracks. It is also a hill-resort much patronised by Parsis and others from Bombay.

117 m. Nasik Road station * D.B. The town, the *Nasika* of *Ptolemy*, 2000 ft. above sea-level (population 38,230), lies 5 m. N.W. of the station. A tramway and taxi motors convey passengers from the station to the town. The links of the Western India Golf Club, which are at Nasik, are a favourite resort for the residents of Bombay. There is accommodation at the Clubhouse for bachelors and also for married couples. English visitors belonging to recognised clubs are eligible for election. The climate is equable and pleasant. There is a motor ramp at the ry. stn. and petrol can be obtained in the town.

Nasik is one of the most holy places of the Hindus, owing to its position on the banks of the sacred river Godavari, about 19 m. from

its source at Trimbak, and may be called the Western Benares, as the Godavari is termed the Ganga—"Ganges." The sacredness of the river is said to have been revealed by Rama to the Rishi Gautama. The Godavari and Ganges are said to issue from the same source by an underground passage. Thirteen hundred families of Brahman priests are settled here, and all Hindus of rank on visiting it leave a record of their visit with their Upadhya, or "family priest," for each noble family has such a priest at each celebrated place of pilgrimage. In this record are entered the names of the visitor's ancestors, and thus the pedigree of every Hindu chief is to be found in the keeping of these Upadhyas. Even Sir Jang Bahadur (1816-1877), formerly *de facto* ruler of Nepal, had his Upadhya at Nasik. The present Gaekwar owes his seat on the throne to this, for when, in 1874, the Gaekwar, Malhar Rao, was deposed, and an heir sought for, the family Upadhya at Nasik supplied proofs of the young prince's legitimate descent from Pratap Rao, brother of Damaji, the third Gaekwar.

At Nasik the river, here 80 yds. broad, is lined on either side for a distance of 400 yds. with flights of steps, and dotted with temples and shrines, and, as in most Indian cities situated near flowing rivers, the view along the banks when hundreds of men and women are bathing is extremely picturesque. The part of the town which stands on the right bank of the river is built upon three hills, and is divided into the **New Town** N. and the **Old Town** S. The quarter on the left bank, where are the chief objects of interest, is called *Panchavati*. The manufacture of brass and copper ware, especially of idols, caskets, boxes, chains, lamps, etc., flourishes here. Specimens of the beautiful old work, though rare, are still occasionally

to be found in the "old" copper bazar.

The temples at Nasik, though picturesque, have no striking architectural features. The **Sundar Narayan Temple**, stands at the head of the Ghats on the W. side of the city, close to the Sati gate and ground, and is a miracle of art. A marble tablet over the E. doorway records that it was built in 1756 by one of Holkar's Sardars. The cost of the temple and the flight of 68 steps which lead to the river, is said to have been about 10 lakhs. Once a year, on the Kartik full moon (Nov.-Dec.), the temple and steps are brilliantly lighted. Below the temple may be seen the temples of *Balaji* and of the *White Rama*, and the *Memorial*, erected to the Raja of Kapurthala, who died in 1870, near Aden, on his way to Europe. From it the river is crossed by a bridge, completed in 1897, which cost Rs.181,000.

Half a mile to the E., on the Panchavati side, is a fine house of the Rastia family. From here a walk a few hundred yards up a lane leads to five very old and lofty banyan trees (*Ficus indica*). Under the largest is a small building which masks the entrance to the **Sita Gumpah**, or Sita's Cave. (None but Hindus may pass the vestibule.) It consists of a low front room, from which steps descend to two apartments 5 ft. square and 4 ft. high. In the first room are images of Rama, Sita, and Lakshman. In the second is an image of Mahadeo, 6 in. high, which those three personages are said to have worshipped; hence arises the extreme sanctity of the place, which is quite one of the holiest in Nasik. Behind the shrine of Mahadeo is said to be the entrance to an underground passage, now blocked, which led 6 m. N. to Ramsej Hill, where Rama used to sleep. The cave was

Sita's hiding-place, and it was from here that Ravana, disguised as a religious mendicant, carried her away to Lanka (Ceylon). Near the cave is the great temple dedicated to **Kala Rama**, or "Black Rama," which cost £70,000. It stands in an oblong stone enclosure, with ninety-six arches. To the W., up stream, and just before reaching the river-side, is the oldest temple in the place, **Kapaleswar**, "God of the Skull," a name of Siva. The ascent to it is by fifty stone steps. It is said to be six hundred years old, but is quite plain and unattractive. Opposite to it the river foams and rushes in a rocky bed. Rama is said to have passed his long banishment at Nasik. **Rama Kund** is the place where the god is said to have bathed; hence it is specially sacred, and bones of the dead are taken there to be washed away. Opposite to it and in the river itself is a stone dharmasala, with several arches, roofed over, in which ascetics lodge when the water is low. Down the stream, about 20 yds., are three temples erected by Ahalya Bai (p. 148). The first is only a few feet high and long, but the next is a large square building, with a stone foundation and brick superstructure, dedicated to Rama; N. of it is a long dharmasala, and a little down the stream is the third temple, all of stone. About 200 ft. down the stream is **Naru Sankar's** temple, with an elaborately carved portico and a large stone enclosure; this is the last of the temples immediately on the water on the Panchavati side.

At the E. end of the city on the S. bank is the hill of **Sunar 'Ali**, and another called **Junagarh**, or Old Fort, on which is a square building, in which Aurangzeb's chief officials used to reside. They command fine views over the city. West of these are the **Jami**

Masjid and the Sarkar Wada, an old palace of the Peshwa (Chief of the Mahrattas), at present used for Government offices. Its beautiful carved woodwork has been removed; but there are fine examples in the town.

Sharanpur is the seat of the mission founded by the Church Missionary Society in 1835, in the Junawadi part of Nasik, and removed here by Mr W. S. Price in 1855. There was connected with this mission an African Asylum for youths rescued from slavery, and it was from here that Livingstone's *Nasik boys* were drawn. It was closed in 1875, and the boys were taken to the E. coast of Africa. A new church was built here in 1898.

5 m. to the S.W. of Nasik, on the Bombay road, is a group of twenty-three **Buddhist Caves**, called **Pandu Lena**, which vary in age from the 1st century B.C. to the 2nd century A.D., and some of which were altered in the 6th or 7th century A.D. They are on the easternmost of the three conical peaks which form the extremity of the Trimbak range. The caves include three large viharas or halls, and one fine chaitya or chapel, and are excavated at the back of a terrace 350 ft. above the level of the plain. The path to the caves,¹ which are numbered from W. to E., reaches the terrace about the middle of them.

Nos. 1 and 2 are damaged and unimportant. No. 3 is a large vihara, measuring 41 ft. by 46 ft. and having a stone bench and eighteen cells round the sides and end walls. In the veranda,

behind a decorated screen rail, are six octagonal pillars, carrying four elephants, or bullocks or horses, on their capitals; and above these is a frieze of rail pattern, with a band of animals at the bottom of it. The sculptured door leading into the cave resembles the gateways of the Sanchi tope (p. 167); over it are the three Buddhist symbols of the Bodhi tree (p. 58), the dagoba or tope, and the chakra or wheel of the law, and on each side of it is a guardian dwarfpal. In the centre of the end wall of the cave is a large relief of a dagoba. The details of this cave and of No. 10 are almost identical, but the latter is of much earlier date; the carved screens and rail patterns in both of them are specially noticeable. No. 4 is another damaged cave; the next five are marked only by simple rail or other decoration. The vihara No. 10 measures 43 ft. by 45 ft.; it dates from shortly after the Karli Cave (p. 523), and the carving in it is much more graceful and pleasing than that in the copy of it, No. 3. No. 11 is a small vihara with six cells off it; the chambers Nos. 12-14, now forming a group, were probably once separate, each forming a small hermitage. Nos. 15 and 16 are much damaged. No. 17 is a smaller vihara, measuring 23 ft. by 32 ft. The veranda, which is borne by octagonal columns, with elephants and riders, is approached by a flight of steps at one end of it and not in the centre; on the wall of the back aisle, separated from the cave by similar columns, is a large seated image of Buddha. No. 18 is the Chaitya Cave, the oldest of the group, and nearly contemporary with that of Karli. The front, which is decorated with Buddhist railings, dagobas, serpents, and chaitya windows, is extremely effective; the elaborate carving in the head of the doorway under the great window, which is finished with a representation of wooden

¹ The detailed account of these caves, as well as those of Ajanta, Ellora, etc., is taken mainly from the monumental work on the *Cave Temples of India*, by Fergusson and Burgess, published by order of the Secretary of State for India in 1880. Those who are specially interested in the subject will find the original work indispensable.

beams, simulates the wooden framework with which such windows were once fitted. The interior measures 39 ft. by 22½ ft. by 23¼ ft., and is divided by two rows of five plain octagonal columns into a nave and two aisles; at the end of the nave five more columns run round the back of a dagoba 6½ ft. high and 5½ ft. diameter. No. 20, at a lower level, is a small vihara with six side cells. No. 21 is the third largest vihara, measuring from 37½ ft. to 44 ft. across and 61 ft. deep. The veranda is carried by four octagonal columns, with bell-shaped capitals. On either side of the hall are eight cells, and in the end wall are three cells and an antechamber, from which two more cells open; all three walls are faced by a low bench. The antechamber to the shrine has two carved columns; the door of the latter is flanked by two gigantic dwarpals. Inside it is a colossal seated image of Buddha, 10 ft. high, attended by two *chauri*-bearers. Nos. 22 and 23, at the extreme east end of the terrace, are both much damaged; the last and No. 2 are Mahayana caves, the rest being older Hinayana works. In addition to the caves, there are a number of cisterns on the terrace, which affords beautiful views of the country round Nasik.

On the road to **Trimbak** from Nasik (19 m. S.W. by road) are several stone-faced wells, and at Prayag Tirth, on the right of the road, is a beautiful tank lined with stone, and with stone steps and two small pagodas built by Ahalya Bai. Near Anjaneri two conical hills, about 900 ft. high, face each other on either side of the road. From these the hills run in fantastic shapes to Trimbak, where they form a gigantic crescent from 1210 to 1500 ft. high. Below this mountain wall, which has near the top a scarp of about 100 ft., is the small town of about 4000 in-

habitants. It derives its name from *Tri*, "three" and *Ambak*, "eye," "the three-eyed" being a name of Siva. The Fort stands 1800 ft. above the town, and 4248 ft. above the sea. The Temple of **Trimbakeswar**, which is on the E. side of the town, not far from where the Nasik road enters, was built by Balaji Baji Rao (1740-1761), third Peshwa, at a cost of £90,000. It stands in a stone enclosure, which has no corridor, but a portico, which is the music gallery, and is 40 ft. high. The ascent is by steps outside, and strangers are permitted to mount in order to look into the interior of the temple, which none but Hindus may enter. A flight of six hundred and ninety steps up a hill at the back of Trimbak leads to the sacred source of the river Godavari, where "the water trickles drop by drop from the lips of a carven image shrouded by a canopy of stone" into a tank below. This is the sacred bathing-place of pilgrims, and is called the Kushawart. Bathing is said to cleanse from the worst sins. At the S. end is a temple to Siva.

147 m. **Lasalgaon** station. From this place *Chandor*, an interesting town overhung by a fine hill-fort, is 14 m. N. by a good road. The Maharaja Holkar is hereditary Patel of Chandor. The fort was taken by the British in 1804, and again in 1818. Panthers are numerous in the hills overlooking Chandor.

162 m. **Manmad** (Manmar) junction station, D.B. (R.). This is the terminus of the Dhond and Manmad Ry., which forms a chord line between the N.E. and S.E. branches of the G.I.P.R., and the Godavari Valley branch of the Hyderabad State Ry. also runs from here to Daulatabad and Aurangabad (for the Caves of Ellora) and, finally, to Secunderabad (Route 4). About 4 m.

S. are the Ankai Tankai Forts, now in ruins, and seven Buddhist caves of some interest. Between the caves and the station rises a curious hill called Ram Gulni, ("one finger" hill), surmounted by a natural obelisk of trap rock 80 or 90 feet high.

204 m. **Chalisgaon station**, branch 35 m. to Dhulia (pop. 29,497), hdqrs. of the West Khandesh District. There is a good D.B. at Dhulia sufficient to accommodate two travellers. Petrol can be obtained. Dhulia is connected by a motor-car service with Nardana (District bungalow) on the Tapti Valley Railway, 20 m. N. along the Agra road. 110 m. from Dhulia, on the same road, is Kalghat (Inspection bungalow), on the Narbada, which can be crossed from October to June by a trestle-bridge: passable for motors (toll, Rs.2).

261 m. **Jalgaon junction** (D.B. khansama, and supplies); starting point for a visit to the Ajanta Caves (Route 3). The extension of the Tapti Valley Railway (p. 195) from Bhusawal to Amalner (see below) and Surat passes through Jalgaon. Headquarters of the East Khandesh District (pop. 1,075,837), which is the richest, as well as one of the largest and most populous in the Bombay Presidency. Formerly the haunt of aboriginal hill-tribes and wild tribes, it has now become a prosperous and fertile cotton-growing district, with 141 cotton-gins and presses, and two cotton-spinning mills. But in the hills that enclose it on the N., E. and S., the tiger and leopard still roam in numbers; bears are to be found. Sambhar and spotted deer are to be shot. The headquarters offices of the District and other buildings are fine. There are two High Schools and several advanced educational institutions

in the city. A civil Hospital has been built by public subscription in memory of his late Majesty Edward VII. Connected with it is a District Nursing Association with a capital, publicly subscribed, of Rs. 80,000, to supply nurses to this hospital and to district dispensaries.

Amalner junction station, 35 m. W. from Jalgaon. Terminus of the Tapti Valley railway from Surat (160 m.); the line continues (51 m.) to Bhusawal (see below) through Jalgaon. Amalner (pop. 17,072) has a High School and an Institute of Philosophy, also a cotton-mill: an important commercial centre.

276 m. **Bhusawal junction station** (R.). (A Insp. B. available with permission of the Asst.-Collector, E. Khandesh; no servants or supplies.) An important railway colony called into existence by the G.I.P.R. works. Population, 25,557. Junction between the G.I.P.R. main line and the Nagpur Branch (Route 7).

A through carriage is run daily from Bhusawal to Surat, *via* Jalgaon and Amalner (on the Tapti Valley ry., see above) in connection with the Howrah-Bombay mail *via* Nagpur.

North of Bhusawal the railway passes between the Satpura and Vindhya ranges on the W. and the Mahadeo Hills of the former on the E.; these ranges constitute the geographical divisions between Hindustan (N. India) and the Deccan or South-country.

278½ m. **the Tapti Bridge**, one of the most important works on the line. The first bridge built was abandoned in consequence of the inferior nature of the stone of which it was constructed. The present bridge was widened and strengthened by the G.I.P.R. Co.

310 m. Burhanpur station. The city (pop. 36,000) is about 3 m. distant. There is a very fine D.B. in the palace, part of which has been restored for the purpose. Burhanpur has been a place of much importance, and is completely walled in. The wall was built by Nizam Asaf Jah in 1731. The neighbourhood contains some interesting Muhammadan ruins and a curious aqueduct still in use. In the town are two handsome mosques—the Jami Masjid and the Bibi Masjid. The *Badshahi Kila*—a ruined citadel and palace—is beautifully situated on a height overlooking the Tapti river. The Mughal water-works form, perhaps, the most important monument of the past glory of Burhanpur. They were constructed for the most part between 1618 and 1650. The place was founded in 1400 A.D. by Nasir Khan of the Farrukhi Dynasty of Khandesh, and was annexed to the Mughal Empire by Akbar in 1600 A.D. It was the capital of the Deccan Province of the empire when in 1614 A.D. Sir Thomas Roe, ambassador from James I. to "The Great Mogul," passed through, and paid his respects to the Viceroy Prince Parviz, son of Jahangir, and it was near here at Zainabad that Shah Jahan's wife, the "Lady of the Taj," died in 1629 (see p. 268). In 1635 the seat of government was transferred to Aurangabad (p. 83), but between 1720 and 1748 it was the headquarters of the Nizam Asaf Jah. It was occupied by the army under General Wellesley on 16th October 1803, given back to Scindia the next year, and finally passed to the British in 1860. It is now British territory. The principal handicraft of the town is the production of silk cloth embroidered with gold and silver lace, which continues now in the same manner as described by Tavernier in 1658. It is also the centre of a gold and silver wire industry, the drawing

of which by a special set of craftsmen is an interesting operation, and can be seen by arrangement. There is a considerable trade in export cotton, and the town contains a spinning and weaving mill, and several ginning and pressing factories.

322 m. from Bombay is Chandni station, about 7 m. by road from **Asirgarh**, a very fine hill fort, a conspicuous object from the railway, standing at an elevation of 2300 ft. above sea-level. A conveyance must be arranged for from Burhanpur, the assistance of the Tahsildar being requested. It is best to stop a night at Asirgarh R.H. (all supplies to be taken). The expedition is a very interesting but tedious one, and involves a climb of well over 1000 ft. The fortifications and gateways are in a very good state of preservation. The walls were breached and the fort captured on 21st October 1803 by Colonel Stevenson, and again taken on 9th April 1819 by General Doveton. Historically it is one of the most important forts, being on the main line of communication with the centre of India. Until 1904 it was garrisoned, but the barracks are now dismantled, and some interesting cannon have been removed to Nagpur. At certain times the fortifications are beset by bees, which are very dangerous.

353 m. Khandwa junction station, D.B. (R.). A civil station, the headquarters of the district of Nimar in the Central Provinces. Khandwa was created a municipality in 1867. It has a population of 26,789. From here the metre-gauge system of the Bombay, Baroda, and Central India Railway runs N. to Mhow, Indore, and through Western Malwa to Ajmer, and thence to Agra, Delhi, Ferozepore, and the Punjab. (See Routes 8 and 10.) The town is supplied with water from Mohghat

reservoir (4 miles); and is lit by electric light. Khandwa is a place of considerable antiquity. Four kunds or small tanks, with stone embankments, have been constructed round the town in the direction of the four points of the compass. On the bank of each tank is a temple, but only one of them is in use. One of the temples at Rameswar has the appearance of a cave. Khandwa has a town hall, a Normal School and a Government High School. It is a centre for the export of raw cotton, and contains several ginning and pressing factories.

417 m. **Harda** station, D.B. good (population 11,077). Headquarters of a Subdivisional Magistrate, and an important mart for the export of grain, cotton and seeds. Here the railway enters the great wheat-field of the Narbada Valley, which extends to Jubbulpore. There is a good road, which leads to Indore, crossing the Narbada river at Handia.

464 m. **Itarsi** junction station, D.B. (R.). The G.I.P. broad-gauge line to Delhi (Route 9) runs N. *via* Hoshangabad, Bhopal (p. 163), Bina (junction for Katni, p. 40), Jhansi (branch, 137 m. to Cawnpore), Gwalior (p. 180) and Agra (p. 265). The Bombay-Calcutta mail proceeds *via* Jubbulpore. A branch to Nagpur (185 m.) from Itarsi, which runs S. through Betul, has been opened for traffic since the end of 1924 (p. 141). From Amla jn. (81 m.) a further branch goes E. to join the B.N.R. narrow gauge system at Parasias through the Chhindwara coalfield.

The Betul District is cool but malarious: in the open portion the elevation varies from 1500 to 2200 feet. In the E. and S. the hills are much higher, the Khamla plateau in the S.W. corner being 3787 ft. above sea-level. The

open tract lies in the centre of the District, and grows wheat as its chief crop; surrounding this tract the country is very broken and clad with forest. Streams of some merit, notably the Tapti, have their source at the top of the plateau, and find their way to the plains below through rocky valleys, often of great beauty. The heavy forest in the outlying portions of the district still provides fair big-game shooting, though it has seriously deteriorated in recent years, and is hard to reach owing to the broken character of the country. The small-game shooting is of the poorest, far worse than that in adjoining Districts below the ghats. Thirty-six per cent. of the population of the District are aboriginals.

Betul, 67 m. from Itarsi by rail (D.B., small club with golf links), is connected with Ellichpur, Chhindwara, Itarsi and Nagpur by metalled roads. Along all these roads there are good rest-houses, or inspection bungalows, 8 or 10 m. apart, but they are in charge of *chaukidars* only, and visitors must arrange to bring their own food and servants with them. The only complete D.Bs. are at Shahpur (on the Itarsi road) and at headquarters.

The district is well worth a visit, if only for its scenery; the ghat sections, where the line enters and leaves the plateau, afford a most pleasant prospect, especially at the end of the rains or in the early cold weather.

The only buildings of interest are the Jain temples at Muktagiri, close to the Ellichpur road on the Berar border. They are worth inspection, but are best reached from Ellichpur (p. 137).

505 m. from Bombay on the line to Jubbulpore, **Piparia** station. There is a comfortable D.B. close to the station. A good road leads

in 32 m. S. to **Pachmarhi**, the hill-station of the Central Provinces. There are many bungalows at Pachmarhi and barracks, which are occupied by the Central Small Arms School and a military Sanatorium. The station is 3500 ft. above sea-level. There is a D.B. on the way at Singanama; the ascent from here, which is 12 m. long, is very pretty. Good large-game shooting in the forests below the station by special arrangements with the Forest Department beforehand. Motor-cars are available at Piparia; the mail-contractors also supply cars on hire: rates generally are Rs.8 per seat in mail cars and Rs.32 for a special car. Other services ply for lower hire. There is a well-found little hotel called the Hill Hotel (a converted D.B.) close to the Club, which admits visitors for limited periods. The scenery is very fine, and there are numerous roads and drives leading to view points.

A visitor would do well to take his own motor-car, as the road up to Pachmarhi is perfect, and it will be very useful on the plateau. As the accommodation is strictly limited and in great demand during the season, it is not safe to trust to finding it, without ascertaining beforehand if it is available. The official *Pachmarhi Guide* may be consulted.

On the S. edge of the Pachmarhi plateau is **Chauragarh**, a square-headed bluff which rises to 4385 feet above the Mahadeo Hills. It is reached from Pachmarhi by a descent through a ravine past the Cave of Mahadeo where a spring flows from beneath an archway 300 ft. within the hill. The place is thronged in February and March by pilgrims, who usually take the S.E. route from Chhindwara.

536 m. Gadarwara junction station. A railway 12 m. long

leads S. to the **Mohpani** coal-mines, worked by the G.I.P. Ry.

Between **590 m. Bikrampur** and **597 m. Shahpura** the railway crosses the Narbada river. The former bridge, which was built in 1863-65, was washed away by heavy floods on 21st September 1926: and the present bridge was opened for traffic in June 1928. It consists of six spans of 169 ft. from centre to centre of the steel trestle piers, and two spans of 45 ft. which are also on steel trestles at either end. The whole of the steel, amounting to about 2800 tons, was supplied from Messrs Tata's works at Tatanagar (p. 145).

616 m. JUBBULPORE station,* **733 m.** from Calcutta by Allahabad route (R.). An important civil and military station, the meeting-place of the G.I.P. and East Indian Railways. A railway line runs to Nainpur (whence there are branch lines running W. to Seoni and Chhindwara and E. to Mandla), 69 m. S. of Jubbulpore, and 73 m. farther on to Gondia junction, on the Bengal-Nagpur line, 42 m. east of Bhandara Road (p. 140). The town is about a mile from the railway station and divided from the cantonment by the railway: conveyances at the railway station.

Jubbulpore (1306 ft.) ranks as the second city in the Central Provinces, and is generally considered as the most desirable of the plains stations. The soil is sandy, water is plentiful near the surface, and the climate is comparatively cool. The town (pop. including cantonments, 108,793) and station are well laid out and well cared for. The Victoria Town Hall has a statue of the Queen-Empress. There are Protestant and Roman Catholic Churches, six High Schools and two colleges (Robertson College and Training College). The former is a fine building near the gun-carriage

factory). It is the headquarters of the Jubbulpore Brigade area; the garrison is a strong one of all arms (three batteries of field artillery, a British and an Indian infantry regiment and an Indian cavalry regiment).

A mile N.E. of the railway station is the Government gun-carriage factory. In or near the town there are a cotton-mill, and two pottery works. Close to the railway station is a well-furnished *dharmshala*, named after the late Raja Gokuldass, whose statue is placed in front of the building.

In the administration of India by the English few subjects have created more interest than the suppression of the *Thags* (*Thugs*), a fraternity devoted to the murder of human beings by strangulation. The principal agent in hunting down these criminals was Colonel Sleeman,¹ and it was at Jubbulpore that a number of Thag informers and their families were formerly confined, and the once famous "School of Industry," was established in 1836. Originally there were 2500 of these people in confinement here. The "School" was closed in 1889, and is now used as a Reformatory School for boys and as an Industrial School, where carpentry and other crafts are taught.

The **Marble Rocks**, known to Indians as *Bhera Ghat*, which are 12 m. from Jubbulpore, are well worth a visit. Tongas and motors can be hired for the trip, and the road is first-class metalled. About $4\frac{1}{2}$ m. to the W. is a remarkable ancient fortress of the Gond Kings, known as the *Madan Mahal*, which is perched on the summit of a huge

granite boulder. At $9\frac{1}{2}$ m. a branch road turns to the rocks, the last half m. being often impracticable for vehicles after rain. On the high ground above the lower end of the right side of the gorge are two small D.Bs. and a number of houses, and 100 yds. beyond the bungalow is a flight of 107 stone steps, some of them carved, which leads to the *Madanpur Temple*, surrounded by a circular stone enclosure. All round it are figures of the sixty-four *Joginis*. Though much mutilated, they deserve examination. Three-quarters of a m. beyond the temple hill the *Narbada* may be reached above the gorge at the point where its waters plunge down the *Dhuanthar* or *Smoke Cascade* into the cauldron at the upper end of the *Marble Rocks*. In a recess below the bungalow is the embarkation place for a trip by boat up the gorge. Two men to row and one to steer are enough. The white cliffs of magnesian limestone are only 90 ft. to 105 ft. high, but the effect of the gleaming faces and rifts is extremely picturesque, especially under moonlight; the water is said to be 150 ft. deep in places. Near the entrance to the gorge, which is about 1 m. long, is a spot named the "*Monkey's Leap*." Farther on is an inscription cut on the right side by order of *Madho Rao Peshwa*, and near the end of the gorge are some curiously-shaped rocks called the *Hathi ka paon*, or *Elephant's Foot*. The gorge is closed by a cascade waterfall over a barrier of rocks. There are usually large nests of wild bees on the rocks, and care must be taken not to excite them by smoking or firing guns. Near the landing-place is a memorial of a young engineer officer who was drowned in seeking to escape the attack of infuriated bees.

540 m. from Bombay, **Sihora** Road station. At **Rupnath**, 3 m. from *Bahuriband*, and about 19 m.

¹ Colonel Sir W. Sleeman's *Rambles and Recollections of an Indian Official and Diaries in Oudh* are among the most fascinating books ever written on India. Meadows Taylor's *Confessions of a Thug* is the finest of all his works.

from Sihora Road railway station, there is a rock edict of the Emperor Asoka, engraved about 232 B.C. It is the oldest inscription, and the only one of its kind, in the Central Provinces.

At **Bahuriband** (17 m. N.W. from Sihora Road) is a Jain statue 12 ft. high. This place is believed to be the Tholobana of Ptolemy. Many ruins of temples are found here. A Sati pillar, dated 1298 A.D., may also be seen.

673 m. **Katni** station junction for the loop (210 m.) from Itarsi (p. 45), *via* Bhopal (p. 163), Bina and Saugor (p. 171); branch S.E. to the coal-fields at **Umaria** (Rewah State), 37 m., and thence to Bilaspur (198 m.) on the Bengal-Nagpur Railway (p. 142). Katni is famous for the manufacture of limestone and the preparation of stone slabs. There is also a cement factory close to the town.

At **Bilahri**, 8 m. S.W. of Murwara, which adjoins Katni junction, images and sculptured stones are scattered all about the village and built into the houses, but few temples now remain. A small fort, partly destroyed during the Mutiny, may be seen.

At **Bargaon** (6 m. from Salaiya station, 33 m. from Katni, on the Katni-Bina line) is a temple dating from the 5th or 6th century A.D. Several other ruins—Brahmanical and Jain—are about a mile to the west; on the banks of the Katni river are more remains. The stones are beautifully carved.

734 m. **Satna** station (R. and Govt. D.B.). A town in the Rewah State, and the headquarters of the Baghelkhand Political Agency. A good motor road runs E., connected with the Great Deccan Road (21 m.), whence **Rewah** (31 m.) and Gov-

indgarh (35 m.) can be reached. The territory of the Maharaja of Rewah extends over an area of 13,000 sq. m., with a population of 1,401,672 and an annual revenue of nearly 56 lakhs. The present ruler, H.H. Maharaja Sir Gulab Singh Bahadur, K.C.S.I., was born in 1908 and succeeded in 1918. To the W. is a good motor road through the Bundelkhand Agency to Jhansi. Near Satna were found the remains of the Bharhut stupa, removed to the Calcutta Museum (p. 113).

782 m. **Manikpur** junction station. From this place the G.I.P. line runs W. to Jhansi, 181 m. (p. 176); at Khairada junction (69 m. from Manikpur), branch to Cawnpore (79 m.) (p. 179).

The Bombay-Calcutta mail train and the Imperial Indian Mail train do not touch Allahabad station but drop passengers for that place at **Chheoki** stn., which is about 5 m. from Allahabad junction. From Manikpur ordinary trains proceed direct to

840 m. **Naini** station (R.). Close by is the **Jail**, one of the largest in India; there are also a Leper Mission and Asylum here. 2 m. farther the line crosses the Jumna by a fine bridge (consisting of 14 spans of 200 ft. and 3 of 30 ft., opened 1865), and enters

844 m. **ALLAHABAD**¹ station * (lat. 25° 26', long. 81° 55'). 513 m. from Calcutta. The official capital of the United Provinces (pop. 157,220) and seat of a University and a High Court. It is situated 316 ft. above sea-level on the left bank of the Jumna, on the wedge of land between it and the Ganges, which the Curzon Bridge (on the O. and R. Ry.) and the B. and N.W. Ry. Izat bridge cross N. and E. of the

¹ *Prayag or Allahabad: a handbook* (Calcutta, 1910).



city. It is the headquarters of the Allahabad Independent Brigade area; the garrison consists of a British and an Indian infantry regiment, a squadron of Indian cavalry, and a battery of field artillery.

The Fort stands near the junction of the two rivers. The Civil Station, Cantonments, and City stretch W. and N.W. from this point 6 m. The present Fort and City were built by Akbar in 1583 A.D., but the Aryans possessed a very ancient city here called Prayag, which the Hindus now call Prag (place of sacrifice). It is a very sacred place with them, as they believe that Brahma performed a sacrifice of the horse here, in memory of his recovering the four Vedas. The merit of almsgiving to Brahmans is enhanced a thousandfold if the gift is made at Prayag. In the 7th century A.D. Hiuen Tsang, the Buddhist pilgrim, visited and described the town. It was first conquered by the Moslems in 1194 A.D., under Shahab-ud-din-Ghori. It received the name of Allahabad in 1584 A.D., and was made the capital of a Province. At the end of Akbar's reign Prince Salim, afterwards the Emperor Jahangir, governed it and lived in the Fort. Jahangir's eldest son, Khusru, rebelled against him, but was defeated and put under the custody of his brother Khurram, afterwards the Emperor Shah Jahan. Khusru died in 1615, and the *Khusru Bagh* (see p. 50) contains his mausoleum. In 1739 Allahabad was taken by the Maharrattas, who held it till 1750, when it was sacked by the Pathans of Farrukhabad. Clive met the Emperor Shah Alam here in 1765 and concluded a treaty by which the diwani (administration) of Bengal, Bihar and Orissa, was granted to the E.I. Company.¹

Thereafter Allahabad changed masters several times, until in November 1801 it was ceded to the British, who had occupied the Fort since 1798.

Allahabad was the headquarters of the Government of the N.W. Provinces from 1834 to 1835, when that was removed to Agra. In 1858, Lord Canning's famous Darbar was held here, after the suppression of the Mutiny, when Queen Victoria's memorable Proclamation of 1st November, announcing the transfer of the government of India from the E.I. Company to the Crown, was read. It then again became the seat of the Provincial administration. In 1902 the N.W. Provinces and Oudh were amalgamated as the United Provinces of Agra and Oudh under a Lieutenant-Governor, who was replaced in 1920 by a Governor. The Governor of the Provinces is H.E. Sir Malcolm Hailey, G.C.I.E., K.C.S.I., who assumed office in August 1928.

In the spring of 1857 the station, with its magnificent Arsenal and strong Fort, was garrisoned by a single Sepoy Regiment, the 6th, to which, on 9th May, a wing of the Ferozepore Regiment of Sikhs was added. The officers of the 6th were confident in the loyalty of their corps, but fortunately a few days later sixty British invalid soldiers were brought in from Chunar. On 5th June most of the Europeans in the place moved into the Fort, thus adding about 100 volunteers to the garrison. The next day the 6th mutinied and murdered their officers and seven young ensigns who had been posted at Allahabad to learn their drill. The eighty men of the regiment on duty at the main gate of the Fort were at once disarmed by a fine display of boldness, the 400 Sikhs remaining staunch, under the influence of their C.O., Captain Brasyer, though they wavered for a moment. Outside the Fort anarchy reigned in the

¹ A picture commemorating this historic event may be seen in the Victoria Memorial Hall at Calcutta (p. 117).

city—the jail was broken open, and the prisoners murdered every Christian they met. Hindu pilgrims, who had come to Prayag to wash away their sins, were robbed and the houses of wealthy Indians were set on fire. A Muhammadan Maulvi was put up as Governor of Allahabad, and took up his quarters in the Khusru Bagh. On the 11th of June General Neill arrived in the Fort, with a body of Madras Fusiliers, and on the morning of the 12th burned Daraganj and regained possession of the bridge of boats, thereby securing a passage for another detachment of Fusiliers from Benares. General Neill then drove the rebels out of the neighbouring villages, and produced such a terror in the city that the inhabitants deserted *en masse*. The Maulvi fled to Cawnpore, and on the 17th June British authority was re-established in the city. General Havelock reached Allahabad on 30th June, and left for the relief of Lucknow on 7th July.

The **Khusru Bagh**, close to the railway station, is entered on the S. side by an old archway, nearly 60 ft. high and 46 ft. deep, overgrown with creepers. Within the well-kept garden are three square mausolea. That to the E. is the tomb of Prince Khusru, W. of it is the grave of a sister of his, and W. again that of his mother, a Rajput lady. They are shaded by some fine tamarind trees. The interior of the mausoleum of Khusru is ornamented with many Persian couplets, and with paintings of trees and flowers, which are now faded. The cenotaph of white marble is on a raised platform, without inscription. To the right and left two of Khusru's sons are buried. All three monuments have recently been put into a thorough state of conservation.

E. of the gardens is the Indian city, containing some picturesque

corners. On the other side of the railway lies **Canning Town**, the older European quarter, laid out amongst a network of wide avenues. The new **High Court** and **All Saints' Cathedral**, a fine 13th-century Gothic structure, 225 ft. long by 40 ft. broad, built of red and white stone, are near the railway station. The throne is a memorial of Bishop Johnson of Calcutta and Metropolitan of India (1876-98). The organ is exceptionally fine. There are memorial windows of Sir John Woodburn, Lady Muir, wife of Sir William Muir (Lt.-Governor, 1868-74), and others. **Trinity Church** lies N.E. of the Alfred Park (made in honour of the Duke of Edinburgh's visit in 1870). It contains a tablet in memory of those who perished in the Mutiny; another commemorates four officers of the Buffs who were killed or died during the Gwalior campaign of 1843, when Sir Hugh Gough fought the battles of Maharajpur and Punniar on the same day. The **Roman Catholic Cathedral**, in the Italian style, with the Bishop's Palace, a Convent and Boys' and Girls' Schools, finely laid out, is W. of the Alfred Park, and near it are the **Club** and the **University Buildings**. There is also the **Macpherson Park** in Cantonments.

In the Alfred Park is the **Thornhill** and **Mayne Memorial**, with a fine public **Library**. It commemorates two former Commissioners of the Allahabad division. Beyond the park is the Government House, and to the N. of the Alfred Park is the **Muir College**, a fine building in the Saracenic style. Close by to the W. is the **Mayo Memorial Hall**, with a tower 147 ft. high. The Empress Victoria memorial statue, also in the Alfred Park, is a seated marble figure under a stone canopy.

The **Fort**, built by Akbar in 1583 A.D., forms a striking object

from the river, but its "high towers have been cut down, and the stone ramparts topped with turfed parapets, and fronted with a sloping glacis." The changes rendered necessary by modern military exigencies have greatly detracted from its picturesqueness as a relic of antiquity. The principal gateway is capped with a dome, and has a wide vault underneath it. It is a noble entrance. The walls are from 20 ft. to 25 ft. high; below them is a moat, which can be filled with water at any time. Within the enclosure lie the officers' quarters, powder magazine, and barracks. Access to the *Zenana building* of the old Palace, though enclosed by the Arsenal, is now possible, thanks to the care of Lord Curzon, by permission of the Local Military Authority. "A square hall, supported by eight rows of columns, eight in each row, thus making in all sixty-four, surrounded by a deep veranda of double columns, with groups of four at the angles, all surmounted by bracket capitals of the most elegant and richest design, and altogether as fine in style and as rich in ornament as anything in India."¹ The building has now been put into a thorough state of repair, and the wooden excrescences which formerly almost entirely concealed it have been removed. Attached to the Fort is a powerful Wireless Installation.

Asoka's Pillar.—In front of the gateway inside the Fort is the Asoka Pillar, which rises 35 ft. above ground. It is of stone, highly polished, and is of much interest on account of its great antiquity. It was found lying on the ground in the Fort in 1837, and was then re-erected. On it are inscribed the famous Edicts of Asoka (issued about 242 B.C.), and also a record of the victories (about

340 A.D.) of Samudragupta (*circ.* 326-375 A.D.), and one by Jahan-gir (1605-27), to commemorate his accession to the throne. There are also minor inscriptions, beginning almost from the Christian era. According to James Prinsep (p. 90), who deciphered this and other Asoka inscriptions in 1838, the insertion of some of these inscriptions shows that the pillar was lying on the ground when they were cut.

The **Akshai Bat (Vata) or undying banyan**.—Hiuen Tsang, the Chinese pilgrim of the 7th century (629-45 A.D.), in describing *Prayag*, gives a circumstantial description of the undecaying tree. In the midst of the city, he says, stood a Brahmanical temple, to which the presentation of a single piece of money procured as much merit as that of a thousand pieces elsewhere. Before the principal room of the temple was a tree surrounded by the bones of pilgrims who had sacrificed their lives there.

The tree is situated under the wall of the Palace, and is reached by proceeding straight on from the pillar. Close by is a deep octagonal well flanked by two vaulted octagonal chambers. A few steps lead to a dark underground passage, which goes 35 ft. straight to the E., then S. 30 ft. to the tree. As no tree could live in such a situation, the stump is no doubt renewed from time to time. Some images are ranged along the passage. In the centre of the place is a lingam of Siva, over which water is poured by pilgrims. General Cunningham, in his *Ancient Geography of India*, gives an interesting sketch of the probable changes in the locality, and concludes: "I think there can be little doubt that the famous tree here described is the well-known Akshai Bat or undecaying banyan tree, which is still an object of worship at Allahabad."

¹ *History of Indian and Eastern Architecture*, by J. Fergusson, J. Burgess, and R. P. Spiers, 2, 298.

The ramparts at the N.E. side of the Fort afford a fine view of Tribeni Ghat, the Confluence of the Ganges, which is $1\frac{1}{2}$ m. broad, flowing from the N., with the Jumna, $\frac{1}{2}$ m. broad, flowing from the W., and the Saraswati. The Ganges is of a muddy colour, the Jumna is bluer. The *Magh Mela*, a religious fair of great antiquity, to which Allahabad probably owes its origin, is held at Tribeni every year about the month of January. On the chief day of the fair, called the *Amáwas*, about 1,000,000 pilgrims bathe, in ordinary years, at the confluence of the sacred rivers: at the *Kumbh Mela*, held every twelfth year, the number of bathers on the *Amáwas* day is between 3,000,000 and 4,000,000. On ordinary days the attendance would, in ordinary years, be perhaps 20,000: in the *Kumbh* year it might be 200,000: but the figures vary greatly on festival days, according to the importance of the occasion.

W. of the Fort is the Minto Park, with the memorial (1910) of the Royal Proclamation of the assumption of the rule of India by the British Crown on 1st November 1858. It consists of a stone *lat*, with medallions of Queen Victoria and the late King-Emperor Edward VII., surmounted by four lions bearing the Imperial coronet. Farther W. up stream of the E.I.R. Bridge over the Jumna is the Ewing Christian College of the American Presbyterian Mission.

The Akbar Band runs N.E. from the Fort to Daraganj. Here the B. and N.W. Ry. crosses the Ganges by the Izat bridge of 40 spans of 150 ft. each, to Jhusi, and runs 73 m. to Benares. Beyond the old Cantonment the railway line to Jaunpur (p. 431), Fyzabad, and Lucknow crosses the Ganges by the fine Curzon Bridge (15 spans of 200 ft.).

There are roadways on the Jumna and Curzon railway bridges,

by which motors can pass. The Izat bridge on the Bengal and N.W.R. to Benares has no provision for road traffic. The old road to Rewah and Jubbulpore is metalled only up to the tenth mile, and beyond this is neglected. There are several petrol shops in Allahabad, and motor cars can be repaired. The following routes can be taken by motors from Allahabad: (1) To Benares, 78 m., and 45 m. on to Ghazipur; (2) to Jaunpur, 57 m., and 44 m. on to Mirzapur; (3) direct to Mirzapur, 57 m.

Bhita is 11 m. by road S.W. of Allahabad, and on the opposite side of the Jumna. Excavations, conducted by Sir J. H. Marshall, Director-General of Archaeology, show that Bhita was the site of a settlement from prehistoric ages, and that it was a fortified city from the Mauryan (321-184 B.C.) down to the Gupta (320-455 A.D.) epoch, when it appears to have been deserted and given over to the neighbouring jungle tribes, who were still in the neolithic state of culture. The city is surrounded by an earthen embankment surmounted by a brick wall, some 11 ft. in thickness, which was strengthened by bastions on the outer side and by guard-houses within. The circuit wall seems to have been pierced by three gateways—one on the west and one in the middle of the north-east and south-east sides. Arrow-heads of iron, and numerous sling or catapult balls of stone, marble, and earthenware have been found within the walls, the balls ranging in dates from the 7th or 8th century B.C. to the later Gupta period (455-606 A.D.). Nearly all the interior of the fort which has so far been excavated is occupied by bazars and houses of considerable size divided up into well-defined blocks by roads and narrow alleys. The most modern of the buildings belong to the

later Gupta epoch, and are characterised by the smallness of their rooms and the poorness of their construction. Below these come structures of the early Gupta or Kushana (45-225 A.D.) period, which are largely constructed out of the remains of earlier structures. The latter, forming the third stratum, belong to times preceding the Kushana dynasty; while the fourth and the lowest series of houses belongs to the epoch of the Mauryas. In the debris of each of these strata numerous small articles have been found, which clearly and accurately define the successive periods of occupation. Before the Mauryan epoch kiln-burnt bricks do not appear to have been extensively used on this site, though here and there small fragments of walls testify to their manufacture being understood for two or three centuries previously. Floors of well-made concrete and of burnt clay, on the other hand, occur in the lower strata, which must go back at least some seven hundred or eight hundred years B.C., and associated with them are well-made vessels of grey and red pottery (frequently covered with a black metallic glaze), terra-cotta figurines, roof finials, and the like, which prove that even in those early ages the culture represented here was considerably advanced.

The brick buildings of the Mauryan and subsequent epochs are singularly well preserved, standing in some cases to a height of 10 or 11 ft., in spite of the fact that their walls are mainly built of a single thickness of brick laid in mud, and they are invested with particular interest as the first examples of complete domestic dwellings which have been excavated in India. Those of the Mauryan and Kushana period contain on an average about twelve rooms on the ground floor, ranged on the four sides of an open courtyard, with what ap-

pears to have been a covered veranda along one side, and one or more passages between the chambers giving access to the side streets. One of the corner rooms was utilised for stores or treasure, a deep chamber being sunk below the floor to a depth of as much as 30 ft. The walls of private houses which face the main street were not pierced with doors or windows, but presented a blank face on the ground floor and a solid projection, some 4 ft. thick or more, was added in front of them for the purpose of strengthening the walls or of carrying a veranda above. The upper storeys were no doubt constructed largely of wood, and have completely disappeared; but, judging from the foundations, it may be surmised that they were confined to one side of the house only. The roofs were protected with terra-cotta tiles and ornamented with pinnacles of the same material, from which it may be assumed that they were pitched at an angle and not flat. A feature of some interest in the plans of these houses is their obvious similarity to the monasteries of the Buddhists, which we may now presume were copied from the domestic dwellings of the time. The shops consist of single rows of chambers facing the street, with a raised platform in front, such as are commonly seen in the bazars of to-day.

Among the antiquities recovered from these remains the most noteworthy are—seals of ivory, bronze, and stone, and sealings of clay, which furnish us with the names of the householders and of the places and people with whom they were in correspondence; coins of the Kushana Emperors of the North, of the Andhras of the South, and of the kingdoms of Avanti, Kausambi, and Ajodhya; terra-cotta statues and figurines, well-finished in colour, which portray in detail the costumes of the time; copper and earthen-

ware vessels of manifold shapes and various fabrics; goldsmiths' utensils; toilet boxes of steatite and marble, personal ornaments of many kinds; to which may be added also a number of celts and stone implements belonging to the jungle tribes referred to above.

The E.I.R. main line from Delhi passes through Allahabad and the trains to Calcutta cross the Jumna to Naini and proceed thence to

891 m. from Bombay, 458 m. from Calcutta, **Mirzapur** station (D.B. and P.W. Inspection Bungalow). A well-built city. Pop., 54,994. Before the opening of the East Indian Railway it was the largest mart on the Ganges for grain and cotton; much of this trade is now diverted elsewhere, but it is still a commercial centre of importance. There are excellent sandstone quarries near, on which Government levies a royalty. Mirzapur is noted for its brass industry, and for its hand-made woollen carpets and rugs, dyed with old native vegetable dyes, which are very permanent. Shellac is prepared from stick-lac at eighty factories and large quantities of Bengal silk are absorbed for distribution in Upper India. There is a handsome river front, with fine ghats and temples, containing some beautiful carvings. The Civil Station is to the N.E. of the city. 6 m. from the town is the deserted Cantonment of Tara where there is a fine waterfall of 60 ft. caused by the descent of a rivulet from the plateaux of the Vindhya range. The Deccan Trunk road from Nagpur and Jubbulpore ends at Mirzapur, which is 242 m. from Jubbulpore and 102 m. from Rewah. This road is described as fit for careful slow motoring in the cold weather. Mirzapur to Jaunpur, 44 m.; to Allahabad, 57 m. At Bindhachal stn., 4 m. W. of Mirzapur, is a **Kail** temple which used to be the

rendezvous in India of the Thugs. The cluster of shrines on the river-bank presents a picturesque view from the line.

438 m. from Calcutta, **Chunar** (pop. 6960) has a famous old Fort on an isolated hill (2 m. from stn.), commanding the Ganges (now used as a Reformatory for boys). The Emperor Humayun (1530-56) took it in 1537, but Sher Shah Sur, the Afghan, recaptured it shortly after, and strengthened himself against Humayun. It was recovered by Akbar in 1575, and remained with the Mughals till 1750, when it fell into the hands of the Nawab Wazir of Oudh. The British gained it after the battle of Buxar in 1764. It was to this fort that Warren Hastings retreated from Benares in 1781, after Raja Chait Singh's rebellion. The tomb of Iftikhar Khan, a Governor in Jahangir's reign, is here. There is a fine stonework screen round the mausoleum of Shah Kasim Suleimani, which stands in a durgah, or walled enclosure. Up to 1860 at least, Chunar was the residence of the European "invalids" of the Bengal Army. Heber mentions meeting one of them in 1824 "who had fought with Clive." It is still a favourite resort with Anglo-Indian pensioners. Inspection Bungalow in the Fort; permission to occupy must be obtained from the Executive Engineer, Allahabad.

418 m. from Calcutta, **Mughal-sarai** junction station (R.) for **Benares Cantonment** station, 10 m. distant (Route 5), across the Ganges, crossed by the Dufferin steel bridge, nearly $\frac{1}{2}$ m. long.

(a) By E.I.R. *Grand Chord* from *Mughal Sarai to Asansol* viâ *Gaya, Isri (for Parasnath Mountain) and Sitarampur.*

From Mughal Sarai the Bombay mail train to Calcutta follows

the Grand Chord route through Gaya to Asansol.

386 m. from Calcutta and 33 from Mughal Sarai, **Bhabua Road** (Inspn. Bung.); 10 m. to the S. is Bhabua (Inspn. Bung.) and 5 m. to the S.W. of Bhabua is the ancient Hindu temple of Mūndeswari, on the summit of a hill 600 ft. above sea-level; an inscription dates it to 635 A.D. Eight miles S. of Bhabua are immense earthwork fortifications. They enclosed in a valley an ancient town, the only remains of which are broken bricks covering an area of about 2 sq. m.; the foundations of the houses are still below the soil. 6 m. to the W. of Bhabua is Chainpur, once an extensive town, now no more than a large village. A short distance to the W. is the mausoleum of Bakhtiyar Khan, a noble of the time of Sher Shah; it is a splendid domed structure similar to those in Sasaram, standing in an enclosed courtyard. There is a fort at Chainpur built by Raja Salivahan, whose descendants reside now at Bhagwanpur, 6 m. S. of Bhabua. The fort is now a famous place of pilgrimage, owing to a Brahman priest having done "dharna," or fasted there till he died. Scattered over all this part of the country are the remains of old forts, attributed to the Savars or Suiris, an aboriginal people. They consist of high mounds of earth, on which used to be situated the house of the local chief, the whole being surrounded by a deep moat. Fifteen miles N.W. of Bhabua Road station is Baidyanath (popularly, Baijnath), containing traces of buildings which date back to early and mediæval Brahmanism. It is believed to have been the centre of the Savar kingdom.

372 m. from Calcutta, **Kudra** (D.B.). 16 m. to the S. is the hill-fort of Shergarh, on a small

plateau about 800 ft. in height. It was fortified by Sher Shah, and a palace, still in a fair state of preservation, built on the summit. Eight miles farther into the hills are the caves of Guptaeswar, several hundred feet in length, and a noted place of worship.

356 m. **Sasaram** (pop., 22,308, D.B.). The full name Sahasram (Sahasra Arjunpura) is said to be derived from Arjuna, a chief with a thousand arms, which were cut off by Parasu Rama. A view can be had from the train of the colossal domed mausoleum of Sher Shah (1540-45), the Afghan usurper Emperor of Delhi, one of the most magnificent in all India (see Fergusson's *Indian Architecture*, 2, 218); it rises from a terrace in the midst of a tank 1000 ft. square. The height from the floor to the apex of the dome is 101 ft., the total height above the water being over 150 ft.; the dome has a span of 72 ft. In the town is the slightly smaller mausoleum of his father Hasan Sur Shah, standing in an enclosed courtyard, and about a mile to the N.W. is the tomb of his son, Salim Shah, which was intended to be larger than his father's, but was never completed; it also stands in a tank. These buildings should be seen by all interested in Oriental architecture. In a small cave just below the summit of a hill rising above the town is an Asoka inscription dating back to 232 B.C. A light railway (61 m.) runs from Sasaram to Arrah (p. 61) and connects the Grand Chord with the E.I.R. main line.

345 m. from Calcutta, **Dehri** (D.B.). Here the river Son, which is about 2 m. wide, is spanned by a vast girder bridge (opened in 1900), with 93 spans of 100 ft. each, the total length being 10,052 ft. Above the bridge the Grand Trunk

Road crosses the river over a stone causeway, and higher up are the headworks of the Son Canals, consisting of a reservoir dam $2\frac{1}{2}$ m. in length, with the main canals branching off on either side. The G.T. Road terminates on the E. bank at Barun (2 Insp. Bs.). Motor cars should cross by rail from Dehri on the W. bank to the Son E. bank stn., as the causeway is not passable for cars. A light ry. runs from Dehri up the river to Rohtas station, 24 m., overlooking which is the ancient hill-fort of **Rohtas** (Inspn. Bung.) occupying a plateau 4 m. by 5 m. and 1500 ft. above sea-level. The fort was impregnable, being surrounded for the greater part by sheer precipices 500 ft. to 1000 ft. in height, with the few comparatively vulnerable points protected by strong defensive works consisting of double and triple lines of ramparts and bastions. Its natural facilities admirably fitted it for a siege, the summit being wooded and capable of extensive cultivation, with a plentiful supply of water at all seasons, and excellent grazing. It is of very ancient origin and was taken from its Hindu ruler by Sher Shah in 1539 by means of a stratagem. Man Singh strengthened the fortifications in 1607: but it was peaceably surrendered to Capt. Goddard in 1764. There are a Mughal Palace in an excellent state of preservation and two villages on the plateau. The palace is composed of a number of buildings and is entered from the W. through a great courtyard.

342 m. **Son East Bank stn.** A branch line (80 m.) runs to Daltonganj; and was extended in December 1928 to Barkakana on the B.N. Ry. (p. 145) a few m. W. of Ramgarh in the Damodar valley. Here it meets the B.N.R. broad-gauge line from Kharagpur

via Muri, 40 m. from Ranchi, the summer headquarters of the Bihar and Orissa Government (Route 7).

292 m. from Calcutta, **Gaya,*** (D.B. about 1 m.; R. room at Station; a few taxis available), is a city of 67,562 inhabitants; nearly 90 per cent. are Hindus. It is connected with the main line E.I.R. by the S. Bihar Ry. to Lakhisarai and the Patna-Gaya Ry. to Patna Jn. Motor service, 2 hrs., Gaya to Sherghati.

The district of Gaya, which was included within the ancient kingdom of Magadha, contains many places of great sanctity. The name Gaya is said to have been the name of an Asura, or so-called demon, so holy that all who saw or touched him were admitted to heaven. The rocky hills which form a feature of the district, abound in remains, sculptures, images and sites of the religion of Buddha, many of which have been diverted to Hindu worship. The Barabar Caves, 16 m. north of Gaya, and 6 to 8 m. E. of Bela railway stn. on the Patna-Gaya line, are among the oldest monuments in India. Two of the caves have tablets recording their dedication by Asoka himself to the Ajivikas, a sect of Brahman ascetics devoted to Narayan, a form of Vishnu.

Gaya is an important centre of Hindu pilgrimage, and is visited by two or three hundred thousand pilgrims yearly. Devout Hindus from all parts of India come to pray for the souls of their ancestors in purgatory, as part of the general course of pilgrimage of which Gaya is the centre. There is a lengthy legend to the effect that Vishnu promised that the rock on which the old town now stands should be known as *Gaya-kshetra*, and that whoever offered funeral cakes (*pindas*) and performed the funeral ceremonies there should be

translated with their ancestors to the heaven of Brahma: hence the peculiar sanctity of the locality. The Hindu pilgrim, before leaving his home, must walk five times round his native village, calling upon the souls of his ancestors to accompany him on his journey. There are forty-five places within an area of 35 sq. m. at which the pilgrim should offer funeral cakes, but they usually visit only seven and often only three of the forty-five. Arrived at Gaya, he is forthwith placed in charge of a special Brahman guide, with whom he makes the pilgrimage of the place, and he has to bathe in the sacred streams of the Phalgu and the Pūnpūn. *Pindas* are offered on Ramsila hill, which adjoins the town on the N. and also on Pretsila (the Hill of Ghosts), 5 m. N.W. The centre of the pilgrimage is the **Vishnupad Temple** in the old portion of the town, which it is impossible to approach except on foot, owing to the extreme narrowness of the streets. As it is not easy to find, previous intimation should be sent to one of the leading Gayawals (the hereditary priests of the temple), who will, as a rule, most courteously supply a guide. Visitors must remove their shoes if they wish to enter the inner temple; but this is not necessary in the outer parts. The present temple was built about the year 1787 by Ahalya Bai, the princess of Indore (p. 148). It is a solid structure of grey granite; the main building is a *mandapa* or open hall, 58 ft. square, supported on eight rows of pillars in two storeys, and covered in the centre by a dome. The sanctum is an octagonal tower, 100 ft. high, with a pyramidal roof, which culminates in a single pinnacle surmounted by a large gilded flag. Within the sanctum in the centre is an octagonal basin, 4 ft. in diameter, inserted into the pavement and

plated with silver, which surrounds the impress on the rock of the god's foot. The **Vishnupad** (*Footstep of Vishnu*) is about 16 in. long, and 6 in. broad. Flowers and other offerings are made to it. Immediately in front hangs a bell presented by Ranjang Pande, minister of the Raja of Nepal (1838-43), and at the entrance to the sanctum is a second bell bearing an inscription in English: "A gift to the Vishnupad by Mr Francis Gillanders, Gya, 15th January 1790." Gillanders was the Government Collector of the Pilgrim Tax, and died in 1821: his grave is in the old cemetery at the foot of Ramsila Hill. S. of the temple, almost touching it, is a handsome pillared hall or porch, with the pillars let into the solid rock, where the pilgrims assemble before making the round of holy places. In a small shrine on the way to the temple, is the figure of an elephant plucking flowers and fruit, which can be dated to the beginning of the Christian era. A little to the N. of the Vishnupad is a temple with a fine statue of the Sun God: his seven horses driven by Arun are on the pedestal. It stands to the W. of the Surajkund tank. About half a mile to the S.W. and immediately under the Brahma-juni Hill is the *Akshayabat* or undying banyan tree, at which the pilgrims make their final offerings to the Gayawals and conclude their pilgrimage. There is a so-called Gaya black stone, of which ornaments, bowls, and figures of gods and animals, often purchased by visitors, are carved.

In one of these bowls an image is placed of Basudeva carrying the infant Krishna in his arms; it is so contrived that if the bowl is filled slowly, the water runs away without wetting the feet of Krishna.

Buddh (Bodh) Gaya is 7 m. S. of Gaya. There is a good metalled

road leading up to it. The origin of the **Temple of Buddh Gaya** is of great antiquity, and is closely connected with events of the life of Buddha. The shrine is now in the possession of a monastery of Hindu Saivite sannyasis, which was established at the end of the 16th century. The building, which in its main features, represents the structure seen by Hiuen Tsang in 635 A.D., consists of a main tower, 180 ft. high, in the form of a pyramid, which springs from a square platform, on the four corners of which are four similar but smaller towers. The entrance is on the E., and there is an altar at the W. wall of the sanctum on which is placed a large gilded image of Buddha, which is worshipped by the Hindu monks as an incarnation of Vishnu. The figure of Buddha, which, according to Hiuen Tsang, was of perfumed paste, was destroyed centuries ago. Other figures of plaster were subsequently made and also destroyed. The Temple is built over an earlier temple erected by Asoka. Owing to the removal of accumulations of debris, it appears to lie in a hollow, which diminishes its apparent height, and is also shut in by small houses. Much of the stone railing, which was once believed to be the work of King Asoka, but is now known to be of a date 100 years later, has been restored to the position which it is supposed to have occupied round the original structure. It has four bars of stone, supported by pillars at intervals of 8 ft. The top rail is ornamented with carvings of mermaids, or females with the tails of fish inserting their arms into the mouths of Makaras—that is, imaginary crocodiles with large ears like those of elephants and long hind legs. Below this top bar are three others, also of stone, ornamented with carvings of lotus flowers. The pillars are adorned with carvings of various groups—such as a woman and

child, a man with a woman who has the head of a horse, centaurs, and so on. Twenty-three of the pillars were found by Lord Curzon in the Hindu Mahant's residence, where they were serving as supports to an interior arcade, and were restored at his instance. Some half dozen others have been removed to the museums at Calcutta and South Kensington. Altogether 85 are now *in situ*. Fergusson¹ pronounced this to be "the most ancient sculptured monument in India." The plinth of the temple is 26½ ft. high, and at the top of it is a clear space 13 ft. broad, which allowed a passage round the tower. At each corner of the platform was a small temple, and outside the rail (erected during the Sunga period, 184-72 B.C.) were many subordinate temples. A few yards to the W. of the W. wall of the temple is the famous pipal tree, known as the Bodhi tree, under which the Buddha received enlightenment. Under the tree is a red sandstone slab, the Vajrasan or diamond throne, which is reputed to be the centre of the universe. Round the temple in the sunken courtyard are ranged a number of *stupas* or votive offerings of Buddhist pilgrims.

A Burmese inscription records a restoration in 1306-1309. In 1877 permission was granted for a further restoration; but Raja Rajendralala Mitra, who was deputed by the Local Government to inspect their work, stated that "the Burmese carried on demolitions and excavations which in a manner swept away most of the old landmarks." The remains of the vaulted gateway in front of the temple were completely demolished, and the place cleared out and levelled. The stone pavilion over the Buddha pad was dismantled, and its materials cast aside on a rubbish

¹ *Indian and Eastern Architecture*, 1, 104.

mound at a distance. The granite plinth beside it was removed. The foundations of the old buildings noticed by Hiuen Tsang were excavated for bricks and filled with rubbish. The revetment wall round the sacred tree had been rebuilt on a different foundation on the W. The plaster ornaments on the interior facing of the sanctuary were knocked off, and the facing was covered with plain stucco, and an area of 213 ft. to 250 ft. was levelled and surrounded by a new wall. As a result of Raja Rajendralala Mitra's investigation, a third restoration was undertaken by the Government, and completed in 1884 at a cost of two lakhs. The model used was a presentation in stone of the temple as it existed in mediæval times, and the monument is now worthy of the religion which it personifies.¹

To the N.W. is a small but very ancient temple, in which is a figure of Buddha standing. The doorway is finely carved. A remarkably beautiful image of Buddha, brought from Japan, is located in a R.H. for Buddhists opposite the temple, but there are no Buddhist monks in permanent residence. The Public Works Department maintain an officer at Buddh Gaya who is ready to show visitors round the temple.

From Gaya, the Grand Chord line passes

245 m. from Calcutta, **Kodarma** : noted for its mica mines.

215 m. from Calcutta, **Hazaribagh Road** (D.B.). Motor service to Hazaribagh town (42 m.) and (52 m. farther on) Ranchi (p. 145). **Hazaribagh** (2000 ft. above sea-level), headquarters of the N.E. district of Chota Nagpur of that name, is a pleasant place, sur-

rounded by hills : fine tanks in the neighbourhood. Good motor roads. It may also be reached (42 m.) by motor service from Kodarma stn. Lord Northbrook spent part of the hot weather of 1874 here, instead of proceeding to Simla, on account of the famine in Orissa ; the house in which he stayed is now the Circuit House. There are two hotels. The military Cantonment, in which the Ramgarh Battalion was quartered from 1780 onwards was abolished in 1884. St Columba's College and Zenana Hospital are under the control of the Dublin University Mission.

198 m. **Isri station** : from which **Parasnath Mountain**¹ can be visited, 13 m. N.E. along a good motor road to Madhuban, at the foot of the mountain. **Dumri** (D.B. with two servants), which is 203 m. from Calcutta by the Grand Trunk Road, is 2 m. from Isri. From Madhuban to the summit of the mountain the distance is 5½ m. ; the journey, which occupies 2½ hrs., is made on foot or by chair and bearers. The D.B. on the summit has no provisions or servants, and permission to occupy must be obtained in advance from the Sub-Divisional Magte, at Giridih. (Rent, payable in advance, Rs. 15 a week or part of a week.) The mountain can be reached equally well from the Nimiaghat station (193 m. from Calcutta). There is a D.B. on the Grand Trunk Road, close to the foot of the mountain, 1 m. from Nimiaghat and about 3 m. from Isri. Information should be given beforehand to the Sub-Inspector of Dumri Police Station, for coolies and supplies. Fast trains do not stop either at Isri or at Nimiaghat, with the exception of the Howrah-Delhi express, which deposits the passenger at Isri in the small

¹ For further description of the temple, reference may be made to Rajendralala Mitra's *Buddh Gaya*, Calcutta, 1878; and A. Cunningham's *Bodhi Gaya*.

¹ See Chap. vi. of Mr Bradley Birt's *Chota Nagpur* (John Murray).

hours of the morning and picks him up at the same inconvenient time.

The lover of mountain scenery will, however, enjoy a visit to this far-famed place of pilgrimage. It is 4488 ft. above sea-level, and is the Eastern metropolis of Jain worship. According to tradition, Parasnath, who was the 23rd Tirthankar of the Jains, was born at Benares, lived 100 years, and was buried on this mountain. The numerous temples, though most picturesque, are of no great antiquity.

At Madhuban, 1230 ft., are the local headquarters of the Digambara and Svetambara sects of Jains. The principal representatives of the Jains met with in Bengal are the Marwaris, whose original home is in Rajputana. "The appearance of the snow-white domes and bannerets of its temple, through the fine trees by which it is surrounded, is very beautiful." The ascent of the mountain is up a pathway worn by the feet of innumerable pilgrims from all parts of India. Ten thousand still visit the place annually. The path leads through woods with large clumps of bamboo over slaty rocks or gneiss, much inclined and sloping away from the mountain. The view from a ridge 500 ft. above the village is superb. Ascending higher, the path traverses a thick forest of *sal* (*Shorea robusta*), and other trees spanned with cables of *bauhinia* stems. At 3000 ft. the vegetation becomes more luxuriant, and the conical hills of the white ants disappear. At 3500 ft. the vegetation again changes, the trees becoming gnarled and scattered. The traveller emerges from the forest at the foot of a great ridge of rocky peaks, stretching E. and W. for 3 or 4 m. The saddle of the crest (4230 ft.) is marked by a small temple, one of many which occupy various prominences of the ridge, with a beautiful view. To

the N. are ranges of low wooded hills, and the Barakar and Adjai Rivers. To the S. is a flatter country, with lower ranges and the Damodar River. The twenty-four Jain temples commemorate the attainment of Nirvana (the cessation of individual existence) by twenty of the twenty-four deified saints recognised by the Jains. The situation of the principal temple is very fine, below the saddle in a hollow facing the S., surrounded by groves of plantain and *Ficus indica*. It contains little but the sculptured feet of Parasnath and some marble cross-legged figures of Buddha, with crisp hair, and the Brahmanical cord. Many chapels and altars with such reliefs are dotted about the crest. A convalescent depot for European soldiers was established in 1858, but was abandoned; the officers' quarters are now utilised as a D.B.

187 m. from Calcutta, **Gomoh**, junction for the Bengal-Nagpur Ry. line to (46 m.) Adra; (97 m.) Bankura; (142 m.) Midnapur; and (150 m.) Khargpur Jn. (Route 7, p. 146; Route 25, p. 502).

169 m. from Calcutta, **Dhanbaid**, junction for Bhojudih on the Adra-Khargpur line (see above) and (31 m.) the Jherria coalfield (p. 66).

143 m. **Barakar**, headquarters of the Bengal Steel and Iron Co. The iron ore, which is a high grade hæmatite, is obtained from the Pansira and Buda quarries in the Singhbhum district.

141 m. **Kulti**, another important industrial centre.

138 m. from Calcutta, **Sitarampur**, junction of the Grand Chord and the main line of the E.I.R. Thence to Howrah (p. 66).

(b) *By E.I.R. main line from Mughal Sarai to Asansol, viâ Arrah, Dinapore, Patna and Mokameh.*

The Punjab mail (from Delhi) and the Imperial Indian Mail train (weekly) from Calcutta take a different route from Mughal Sarai to Asansol.¹ Passing Dildarnagar, 434 m. from Calcutta (branch, 15 m. to Tari Ghat, on the opposite side of the Ganges to Ghazipur (p. 474) on the B.N.W. Ry.) the line before reaching Chausa (418 m. from Calcutta), crosses the Karamnasa R. ("destroyer of merit"), which divides the U.P. from Bihar and Orissa. It is believed that the water of this river, if it wets the feet of returning pilgrims, washes away all the merit gained by bathing in the Ganges at Benares.

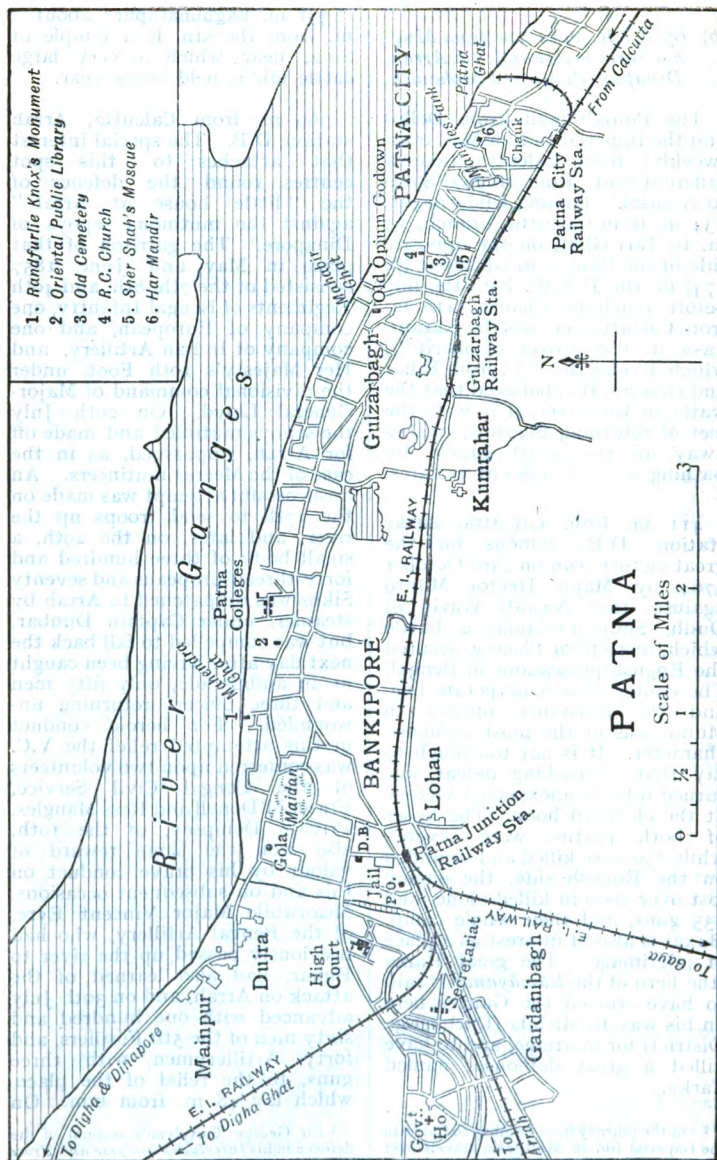
411 m. from Calcutta, **Buxar station, D.B.**, famous for the great victory won on 23rd October 1764 by Major Hector Munro against the Nawab Wazir of Oudh, Shuja-ud-daula, a battle which, more than Plassey, secured the English possessions in Bengal. The contest was a desperate one, and the resistance offered to Munro was of the most stubborn character. It is not too much to say that a crushing defeat was turned into an unexpected victory at the eleventh hour. The losses of both parties were severe; while 850 were killed and wounded on the English side, the enemy lost over 2000 in killed alone, and 135 guns, and their whole camp. Buxar is also of interest as a place of pilgrimage. The great Rama (the hero of the *Rāmāyana*) is said to have crossed the Ganges here on his way to Mithila (Darbhanga District) for marriage, and to have killed a great demoness named Tarka.

¹ On the journey from Bombay to Calcutta the Imperial Indian Mail train travels over the Grand Chord (see p^y 54).

391 m. **Raghunathpur**; about 3 m. from the stn. is a temple of Siva, near which a very large cattle fair is held every year.

369 m. from Calcutta, **Arrah station, D.B.** The special interest that attaches to this spot centres round the defence of the "little house at Arrah" against the mutinous sepoys of Dinapore.¹ The garrison of that place in May and June 1857 consisted of the 7th, 8th, and 40th Regiments of Bengal Infantry, one company of European, and one company of Indian Artillery, and Her Majesty's 10th Foot, under the divisional command of Major-General Lloyd. On 26th July the sepoys mutinied and made off for Arrah, unpursued, as in the case of the Meerut mutineers. An unsuccessful attempt was made on the 27th to send troops up the river, and later, on the 29th, a small body of three hundred and forty-three Europeans and seventy Sikhs was despatched to Arrah by steamer, under Captain Dunbar, but was compelled to fall back the next day after having been caught in an ambush, only fifty men and three officers returning unwounded. For heroic conduct in this attempted relief the V.C. was conferred upon two volunteers of the Bengal Civil Service, Fraser M'Donnell and Ross Mangles. Private Dempsey, of the 10th, also won the same reward of valour by his brave conduct on this and on subsequent occasions. Meanwhile Major Vincent Eyre, of the Bengal Artillery, who had previously passed up the river to Buxar, had also learned of the attack on Arrah, and on 30th July advanced with one hundred and sixty men of the 5th Fusiliers, and forty Artillerymen with three guns, to the relief of the place, which lay 48 m. from him. On

¹ Sir George Trevelyan's account of the defence in his *Interludes in Verse and Prose* should be read.



the 1st August he had a severe engagement with the enemy at Bibiganj, 4 m. to the W. of Arrah town, which was only decided by a resolute bayonet charge; and on the morning of the 3rd he effected the rescue of the Arrah garrison. The little house at Arrah, which had been prepared and provisioned for defence by Vicars Boyle, engineer of the railway then under construction, had on that date been held for a week by twelve Englishmen, supported by fifty of Rattray's Sikhs, against a body of two thousand mutineers and a large mob. The attack was commenced on 27th July, but the garrison, under the Magistrate - Collector, Herwald Wake, and Boyle, met the assailants with so heavy a fire that they speedily fell back to the shelter of trees. On the 28th and 29th the enemy subjected the house to a continuous fire of miscellaneous missiles from two old guns, one of which was finally placed on the top of the larger adjoining house, fifty yards away. On the 30th an effort was made to smoke the defenders out, but this failed; and an attempt to mine the house was not carried to completion before the relief took place. Towards the end of the attack the provisions of the garrison began to fail, and they were obliged to sink a well 18 ft. deep inside the house to provide themselves with water. The house, which now stands in the compound of the Judge, has been converted into an historical monument by Lord Curzon. It was used as a billiard room. In shape it is nearly a square, and has two storeys, with a veranda on three sides, supported by arches, which the besieged filled up with sandbags. The lower storey, which is little over 10 ft. high, was held by the Sikh soldiers. The diary which Wake wrote in pencil on the wall, has unhappily been obliterated by whitewash.

Arrah is on a branch of the *Son Canals*, the great irrigation work of South Bihar, the project of which was designed by Lt.-Col. C. H. Dickens, R.A., and taken over by Government from the East India Irrigation and Canal Co. in 1869. There are Inspection Bungalows at many places all over the District, available for travellers on payment of R.1 a day. A light railway from Arrah to Sasaram connects the Main Line with the Grand Chord Line.

360 m. **Kollwar**. The line crosses the Son River by a bridge of 25 spans of 150 ft. (opened in 1862). There is a roadway for motors under the up-track.

344 m. from Calcutta, **Dinapore** Stn.; 6 m. to Dinapore Cantonment (D.B.), which extends along the right bank of the Ganges: a British infantry battalion is stationed here.

338 m. from Calcutta, **Patna** junction station,* (R., D.B., 12 rooms, close to the railway station), for **Patna New City** and **Bankipore**. New Patna, which stretches for 2 m. W. of Bankipore, is the headquarters of the Governor of Bihar and Orissa. The province (which includes Chota Nagpur) was constituted in 1912 under a Lieutenant-Governor; and the first Governor (Lord Sinha) was appointed in 1920. The present Governor, Sir Hugh Lansdown Stephenson, K.C.S.I., K.C.I.E., assumed office in 1927. The capital is well laid out with Government offices and residential buildings, and is lighted with electricity. The principal buildings are the High Court, the Council House, the Secretariat, Post Office and Government House. A statue by Hampton of Lord Hardinge of Penshurst, in whose Viceroyalty the province

was created, stands E. of the High Court building in Hardinge Park. The Chajju Bagh House, occupied by the Commissioner of Patna during the Mutiny, is the residence of the Chief Justice of the Patna High Court.

Bankipore is the headquarters of the Patna district, and forms the western extremity of **Patna City** (station 6 m. farther E., 129,429 inhabitants), which covers 10 sq. m. and with its suburbs extends 9 m. along the S. bank of the Ganges. Round the Bankipore Maidan, a wide open space containing a race-course and golf-links, are a number of large houses with spacious gardens. The Protestant Church (Christ Church) dates from 1857. On the river-bank to the N. are the Collectorate and Judge's Court, the Medical College and Hospital, the Patna College, the Bihar College of Engineering and the Khuda Bakhsh Oriental Library. In the compound of the Judge's Court is a tall obelisk erected in memory of "the truly gallant Randfurlie Knox," who raised the siege of Patna in 1760, after a memorable march from Burdwan, and died in 1763, after the city was again taken by the forces of the E.I. Company. The **Oriental Library**, which was founded by Maulavi Khuda Bakhsh Khan Bahadur in 1900, is famous for its collection of rare Arabic and Persian MSS.; it possesses the only volumes saved from the sack of the Moorish University of Cordova. A visit should also be paid to the **Gola**, which is at the E. corner of the Maidan. This remarkable building, which resembles a huge beehive, was built for a granary in 1786 "for the perpetual prevention of famine in these Provinces," but owing, no doubt, to the fact that the door opens *inwards*, it has never been used for that purpose, and only temporarily for the storage of grain. It is 426 ft.

round at the base, built of brick, with walls 12 ft. 2 in. in thickness, the interior diameter being 109 ft. It is about 90 ft. high, and might contain 137,000 tons. Inside there is a most wonderful echo, the best place to hear which is in the middle of the building. As a whispering gallery there is perhaps no such building in the world. The faintest whisper at one end is heard most distinctly at the other. The ascent to the top is by steps outside. Sir Jang Bahadur of Nepal rode a pony up the steps outside to the top.

There is a Roman Catholic convent, St Joseph's, at Bankipore near the Civil Court Buildings, and St Michael's School, at Kurji, is at the fourth mile of the Bankipore-Dinapore road.

3 m. E. of the Patna College is **Gulzarbagh** (stn. on main E.I.R. line between Patna Junction and Patna City stns.), the quarter in which the Opium Factory and storehouses were situated. Patna formed, with Ghazipur, the two agencies by which the Government monopoly of Bihar and Bengal opium used to be worked. This opium has been famous from time almost immemorial, and was for many years one of the principal sources of income of the E.I. Company. Under the agreements with China in 1907 and 1911 for the abolition of the use of the drug in that country, the Patna opium agency has been abolished, and the Gulzarbagh Opium Factory was closed in 1911. The buildings, which are on the river-bank and are surrounded by a high wall, are now occupied by the Government Press and a map-drawing office. They are said to stand on the site of the Dutch Factory, which is mentioned by Tavernier (1666), and was finally ceded to the English in 1824. About $\frac{3}{4}$ m. to the W., on a plot of high ground, is the Duchess of Teck Hospital (built

in 1893-95), which is maintained by the Zenana Bible and Medical Mission and is staffed by lady doctors and nurses.

Beyond Gulzarbagh, on the main road, is the western gate of **Patna City** proper or Azimabad, as it is locally called, from the name conferred upon it in 1704 after its Governor, Prince Azim-us-Shan. Near the **Chauk** is the **Har Mandir**, or Sikh temple, which was built by Ranjit Singh, and marks the birthplace (1660) of the tenth Guru Govind Singh. In the temple, which forms one of the four sacred places of the Sikhs, are shown the Guru's cradle and shoes. The small Sikh community which is settled here, is strictly orthodox, and will not eat of food unless it is cooked by a Sikh who carries all the five K's (*kakkars*) on his person, namely: the *Kesh*, or long hair, the *Kirpan*, or iron-handled knife, round which the hair is rolled, the *Kanga*, or wooden comb, the *Kachh*, or drawers, and the *Kara*, or iron wrist bangle. Half a mile W. of the **Chauk** is the old European **Cemetery**, in a corner of which by the City Dispensary, is an obelisk erected over the well in which the bodies were thrown of the sixty English captives¹ murdered at the instigation of Mir Kasim by Samru (p. 338) on 6th and 11th October 1763—a massacre avenged by the storm of the place by Major Adams exactly a month later. The Dispensary is believed to cover part of the site of the house in which the murder took place. Opposite the cemetery is the **Roman Catholic Church** of the Blessed Virgin Mary, which was built in 1775; there are a number of old tombs in the graveyard which surrounds it. Close by is a

tank with a garden round it, known as Mangal Talao or the tank of pleasure, but in reality a corruption of the name of Mr Ross Mangles, V.C. (p. 61), the Collector who had it excavated in 1875. S. of the main road is the Shikarpur quarter with the mosque built by the Emperor Sher Shah (1540-45), the oldest and largest in Patna.

The ancient city of Pataliputra (the Palibothra of the Greeks), lies buried under Patna city and Bankipore. It was the capital of Chandra Gupta (321-297 B.C.), Bindusara (297-274 B.C.), and Asoka (274-237 B.C.), and extended 10 m. along the river and 2 m. inland from the river-bank. Excavations in the hamlet of Kumrahar, S. of the city, have disclosed the remains of a large pillared hall, which resembles the throne-room of Darius at Persepolis; and at Bulandi Bagh, $\frac{1}{4}$ m. W. of Kumrahar, a wooden structure has been found which is thought to be the old wooden rampart mentioned by Megasthenes. To the N.W. of this site is Bhikna Pahari, an artificial hill about 40 ft. in height, which has been identified with the hermitage built by Asoka for his brother Mahendra, the apostle of Ceylon.

Patna Jn. is the junction for the Digha Ghat Branch and the river crossing for the Bengal and N.W. Railway leading to Oudh; and the Patna Gaya Railway, S. On the Gaya line is

8 m. **Pūnpūn** station, on the banks of the river of that name. The waters are supposed to wash away sins: and pilgrims halt here to bathe on their way to Gaya (p. 56).

310 m. from Calcutta, **Bakhtiyarpur**, light railway to Bihar and Rajgir, 33 m. 6 m. S.W. of Bihar is the village of Bargaon, identified with the site of the great **Nalanda** monastery, where Hiuen Tsang, the Chinese pilgrim of the

¹ One of these, H. Lushington, aged only 26, who had already escaped from the Black Hole, slew three of his murderers before he was overpowered. A monument to his memory may be seen in the old Parish Church at Eastbourne.

7th century A.D., resided for several years, and which was the home of 10,000 monks. Interesting excavations are in progress (p. civ). The Rajgir hills are filled with Buddhist and Jain remains.

283 m. from Calcutta, **Mokameh** junction station (R.). Line to the N. for Mokameh Ghat and Tirhut (p. 473). To the E. a loop-line which leaves the main line at (262 m.) **Lakhsisarai** (Kiul) junction station, runs along the banks of the Ganges *via* **Jamalpur** (branch to Monghyr), Bhagalpur, **Sahibganj**, and **Tinpahar** (see Route 23, p. 471) to **Khana** (see below), where it rejoins the main line.

201 m. from Calcutta, **Jasidih** Jn.; branch to Baidyanathdham (Deogarh), whence motor service to Dumka, 41 m., also from Dumka to Rampur Hat, 39 m., on loop-line. Deogarh is a famous place of pilgrimage.

183 m. from Calcutta, **Madhupur** junction station (R.) for the Giridih Line and the coalfield. The upland country at Simultala, Jasidih, Deogarh and Madhupur on this route is regarded by Bengalis as a sanatorium.

138 m. from Calcutta, **Sitarampur**, junction with the Grand Chord line from Mughal Sarai (p. 60).

(c) *Asansol to Calcutta (Howrah).*

132 m from Calcutta is **Asansol** (D.B., pop. 26,499) junction station (R.) of the Bengal and Nagpur Railway (see Route 7). The Grand Trunk Road from Delhi to Calcutta through Asansol deteriorates E. of Asansol; still it is fairly good to Bandel, 26 m. from Calcutta. Petrol available at Asansol, Burdwan and Bandel. The works of the Indian Iron and Steel Co. are at Hirapur, near Asansol.

121 m. from Calcutta is **Raniganj** station (pop. 14,536), D.B. On the E. edge of the great coalfields of Bengal and Bihar, which stretch out 384 m. to the W., and extend under the bed of the Damodar. The place was formerly the property of the Raja of Burdwan, hence the name. More than thirty species of fossil plants, chiefly ferns, have been found in the coal, of similar species to those in the Yorkshire and Australian coal.

That coal existed here was known as early as 1800; "The coal of Bengal is all derived from the rocks of the Gondwana system, and is of the Permian age, or rather younger than the coal of England." The area of the Raniganj field is not less than 500 sq. m. It held the first place as regards outturn until 1905, when its yield was 50 per cent. of the total production of coal in India; but since that date it has fallen behind the Jherria (Jharia) field, about 20 m. W. of the Raniganj field, which possesses many thick seams at shallow depths. These two fields, with the Giridih field, 30 m. N.W. of the Raniganj field, and the Bokaro-Ramgarh and Daltonganj areas, 10-30 m. W. of the Jherria field, account for 90 per cent. of the coal raised in India. The total outturn in Bengal and Bihar rose from 900,000 tons in 1881 to 19 million tons in 1926; the figures for Bengal being 5,137,688 tons, and for Bihar 13,955,775. The total output of British India in 1926 was 20.9 million tons; and the number employed, 258,200. The Parbelia colliery in the Raniganj field is 1500 ft. deep. The Raniganj and Jherria fields are liable to spontaneous combustion, and to flooding in the rains. At Raniganj are Burn & Co.'s Potteries and the Bengal Paper Mills.

75 m. from Calcutta is **Khana** junction station for the loop line from Mokameh.

67 m. from Calcutta is **Burdwan** station (R.), D.B. (pop. 34,616), headquarters of a District, and residence of the Maharajadhiraja of Burdwan, the descendant of a Punjab Khatri, who settled at Burdwan soon after the place had been conquered by Prince Khurram, later the Emperor Shah Jahan, in 1624. The present Maharaja, Sir Bijay Chand Mahatab, G.C.I.E., K.C.S.I., I.O.M., was a member of the Bengal Executive Council from 1919 to 1924. He is the leading landholder in Bengal, and possesses a fine Palace. Permission to view the extensive gardens and the fine collection of pictures, which includes a striking portrait by Chinnery, can be obtained on application to the Superintendent.

The "Star of India Arch," at the entrance to the town, was erected in commemoration of Lord Curzon's visit during his Viceroyalty.

38 m. from Calcutta, **Pandua**, now only a small village, formerly the seat of a Hindu Raja and fortified by a wall and trench, 5 m. in circumference, of which traces are still to be seen. A tower, visible from the railway station, standing 120 ft. high, obviously built in imitation of the Kutb Minar at Delhi, is said to commemorate a victory of the Muhammadans over the Hindus in 1340: repaired in 1906-07 by Government, after an ancient lithograph.

24 m. from Calcutta is **Bandel**, junction for the E.B. Ry. to Naihati by the Jubilee Bridge (p. 133). On the Barharwa-Bandel Railway (distances given from Bandel, the junction), is

26½ m. **Kalna** (pop. 8424). A residence of the Maharaja of Burdwan, and formerly the port of Burdwan, on the River Bhagirathi or Hooghly. Inspection Bungalow.

65½ m. from Bandel, **Katwa** (pop. 6823). At the junction of the Bhagirathi and Adjai Rivers. Inspection Bungalow. Light Ry. 32 m. to Burdwan.

23 m. from Calcutta, **Chinsura**, 21 m. from Calcutta, **Chandernagore**, and 13 m. from Calcutta, **Serampore** (p. 130) stations. 4 m. from Calcutta, **Bally** station. Opposite here, from Bally Ghat to Dakhineswar, a quadruple track bridge is being built across the Hooghly river at a cost of 3 crores.

1347 m. from Bombay by the Grand Chord Route is **Howrah**, **Calcutta terminus**. (See Route 6.)

ROUTE 3.

CAVES OF AJANTA.

Jalgaon (p. 43), 261 m. from Bombay and 15 m. from Bhusawal, by the G.I.P. Ry. is the nearest and most direct route from Bombay to the Ajanta Caves. Jalgaon is 35 m. by road from Fardapur in Hyderabad State, and the Caves are 3½ m. S.W. of Fardapur. The journey to the caves from Jalgaon can now be accomplished without any difficulty; and a visit is strongly recommended, for the caves are beyond question one of the most remarkable sights in India. Sir John Marshall, the Director-General of Archæology, places them, with the stupas of Sanchi (p. 165), amongst the noblest memorials of Buddhism in the country. Fergusson, in his *Indian and Eastern Architecture*, has pronounced them to be "the most perfect and complete Buddhist Caves in India, without any admixture of Brahmanism and containing types of all the rest."

Motor-cars can be supplied at Jalgaon if previous intimation is given to the Station-master, and there is also a service of motor omnibuses. The Archæological Department of the Nizam's Government has recommended a scale of charges, varying from Rs.40 to Rs.50, according to the quality of the car, for a day's trip from Jalgaon to the caves and back. There is a D.B. at Jalgaon. For the ordinary tourist one day will suffice for Ajanta; if a start is made early in the morning, the return journey can be completed by the evening. Cars can be had likewise at Pahrur through the S.M. (the visitor in this case should leave the G.I.P. Ry. at Pachora and take the branch line to Pahrur). There are two District Bungalows on the road at Neri and Pahrur, but permission to occupy them must be obtained in advance from the Collector of East Khandesh (at Jalgaon); they are plainly furnished, with no servants or other conveniences of any sort.

Another method of approach is from Aurangabad, which can be reached in two hours by rail from Mamad Junction, 162 m. from Bombay on the G.I.P. Ry. (Route 4). Messrs Nasserwanji & Co. of Aurangabad provide cars on hire for the journey (60 m.). The scale of charges is eight annas per mile; and the time taken is 3 to 3½ hours. Visitors who travel by this route pass through the picturesque old town of Ajanta (5 m. W. of the caves), which is surrounded by a strong wall and a deep moat, completed in 1727 by the first Nizam. Ajanta Town is the place where Sir Arthur Wellesley halted after the battle of Assaye (23rd September 1803). A fine view can be had from the roof of the *baradari*, which was utilised as a hospital for the wounded. By leaving Aurangabad at dawn, it should be possible to visit the

caves and return to Aurangabad in one day, without halting at Fardapur. Since the opening of a road which connects Fardapur with Ellora (Route 4), Ajanta and Ellora can be combined in one excursion; but two days are necessary.

Whether the journey be made from Jalgaon or Aurangabad, the visitor can proceed in his car, from Fardapur direct to the steps leading to the caves (3½ m.). The recent construction of this road, which is a good specimen of modern engineering, obviates the former irritating change to a tonga or bullock cart at Fardapur. There is a travellers' bungalow at Fardapur, and close by a guest-house belonging to the Nizam's Government, which is available only on issue of a permit by the Director of Archæology at Hyderabad. Applications to photograph or sketch the caves should be addressed to the same official. A Curator at Ajanta attends on the visitors and during the cold weather season (October to March), will arrange for board at the Fardapur bungalow at a charge of Rs.5 per day. At other times provisions and a cook should be taken. A Guide-book and picture postcards are published by the Department, and are available at the caves.

The **Caves of Ajanta**,¹ like those of Kanheri, but unlike the majority of Buddhist caves, are excavated in the scarped side of a deep ravine. They form a crescent and are marked with numerals which run consecutively from E. to W. A stream flows down the ravine from the head of the valley above the caves and ends abruptly in a series of seven waterfalls (Sat

¹ Consult J. Burgess's *Buddhist Rock Temples of Ajanta* (1879) and both volumes of Fergusson's *Indian Architecture*. See also *My Pilgrimage to Ajanta and Bagh*, by Mukul Chandra Dey (Thornton, Butterworth, 1925).

Kund), of which the last makes a leap of 70 or 80 ft. The ravine is well wooded and pretty, and the view of the curved front of the caves, from the inner entrance to it, is extremely picturesque. These temples and monasteries date from shortly after the reign of Asoka, 274-237 B.C., to before the expulsion of Buddhism from India, i.e., about 650 A.D. They were visited by Hiuén Tsang about 640 A.D. Historically, says Mr Griffiths,¹ the caves, which are twenty-nine in number, are divisible into two main groups. Near the centre of the crescent are the five earliest—Nos. 13, 12, 10, 9 and 8, enumerated in point of age; these are probably of the 2nd and 1st centuries B.C. The second group in order of age is made up of Nos. 11, 14, 15, 16, 17, 18, 19, and 20; the last probably dating from the latter part of the 6th century A.D. Nos. 6 and 7 come next, but it is possible that they preceded Nos. 19 and 20. Finally, Nos. 1 to 5 on the E., and Nos. 21 to 29 on the W. of the crescent, may be referred approximately to the period between 575 and 650 A.D. Four of the caves (Nos. 9, 10, 19, and 26) are chaityas or chapels, and the rest are viharas or monasteries. Six of them belong to the older Hinayana sect, and the rest to the Mahayanas (p. lxxxii). Seven are unfinished, Nos. 3, 14, 23, 24, 27, 28, and 29.

The world-famous frescoes, which had suffered seriously from moisture and dirt and also from the injudicious application of varnish by copyists, are now in excellent condition. They were carefully cleaned, at the instance of the Nizam's Government, by two Italian experts, Prof. Lorenzo Cecconi and Count Orsini, in 1920-22, and their operations have been most successful with the exception

of a few places in caves 16 and 17, where the varnish had become so engrained that it was impossible to remove it without destroying the colours.¹ The caves are now electrically lighted, and will be illuminated at a fee of Rs. 10 a day. Incandescent light can also be supplied for Rs. 1-8-0 a day.

The following description of the caves commences from the E. of the crescent:—

No. 1 is one of the largest and most splendidly-decorated viharas of all. It was probably the last to be excavated. In the front is a veranda borne by six columns, once preceded by a porch borne by two. Outside the veranda are three excavations on each wing, and inside is one at each end. The hall which measures nearly 64 ft. square, is borne by twenty columns enclosing a central space, and has five cells on either side. At the back an ante-chapel with two columns, flanked by two cells on either side, leads to a large shrine. All along the front of the cave is a sculptured architrave with spirited representations of elephants, hunting scenes, and groups of figures. On the W. chapel are representations of the four scenes of sickness, old age, and death, which led Buddha to renounce the world. In the upper part of the frieze are geese under a band of lions' heads. Three doors and two windows open into the hall from the veranda, the centre door being elaborately carved, as are the columns of the back row in the

¹ *Paintings in the Buddhist Cave Temples of Ajanta*, by John Griffiths (2 folio vols. 1896-97), where many of the frescoes are reproduced.

¹ A magnificent series of photographs in colour, which have been taken on the spot by Mr E. L. Vasey, is in course of publication by the Oxford University Press, under the editorship of Mr G. Yazdani, the Director of Archaeology at Hyderabad (4 Parts at £8, 8s. a part). See also the portfolio of copies made by Lady Herringham and her assistants, and published by the India Society in 1915. Major Gill (d. 1875) spent nearly twenty years (1844-63) in copying the principal frescoes in oils; a number of these may be seen at South Kensington, but many were destroyed by fire at the Crystal Palace on 30th December 1866.

hall and the sides of the other rows which face inwards. These carvings deserve detailed notice, being among the richest and most ornate known. In the shrine is a colossal statue of Buddha, supported on either hand by Indra. At the sides of the elaborately decorated doorway to it are statues of the goddesses of the Ganges and Jumna above, and of two snake-hooded guardians at the bottom. The whole of the cave was once covered with paintings; several beautiful examples have been preserved. In the four corners of the ceiling are interesting panels which represent groups of foreigners—perhaps Persians. On the front wall is represented the reception of a Persian embassy by a Raja in his palace. On the back wall to the E. of the antechamber is a mountain scene, and between the doors of the two cells are a Naga Raja and his wife in conversation with another personage, while high up on the wall is a snake-charming scene; farther on is another scene of a Naga Raja and ladies; and between the second and third cell doors, on the E. wall, is a scene of elephants and soldiers. On the back wall of the antechamber to the shrine is a painting of the Temptation of Buddha by Mara, such as is represented in the bas-relief in cave No. 26.

No. 2 is a vihara hall, 48 ft. square, supported by twelve pillars, with five cells on either side and one chapel room at each side of the antechamber and shrine. There are also two chapel rooms at each end of the veranda, the front of which is carried by four pillars with flower-shaped capitals; the roof of the veranda projects 7 ft. to the front of the columns. Between the hall and the veranda are a finely-decorated door and two windows opposite to the side aisles formed by the columns in the hall, which are richly carved. At the end of these aisles are two chapel rooms, that on the E. side

with the figures of a king and a queen holding a child, with small figures of sporting children below them; and that on the W. side with two large male figures. A richly-carved doorway leads to the shrine; in front of the seated figure in it are kneeling worshippers. Traces of painting exist in this cave on the roofs of the veranda and the hall and its aisles, and in the shrine and the two side chapels. The scenes on the E. wall of the hall represent a royal procession with elephants, horses, and armed retainers, and a sailing-boat laden with jars. On the wall on the left is a painting of the Birth of the Buddha.

No. 3 is a small vihara, of which again only the veranda is shaped out.

No. 4 is the largest of all the viharas, measuring 89 ft. square, and supported by twenty-eight pillars. It is surrounded by cells as usual, and has a large shrine, approached by an antechamber at the back. The veranda was carried by eight octagonal columns, and has three doors and two windows in the back wall leading to the hall, the centre one being decorated with elaborate carvings. Between it and the right window is a sculptured relief of the Buddhist Litany, in which two figures are represented in each compartment as fleeing to Buddha from danger, from fire, snakes, and wild beasts.

No. 5 has been commenced only, but has a handsome door at the back of the veranda.

With Nos. 6 and 7 begins the group of excavations of the Mahayana School. Both are probably natural caverns.

No. 6 is the only cave here with two storeys. The lower stage, of which the front has fallen, measures roughly 54 ft. square. It is borne by sixteen plain octagonal columns in four rows, but only seven of these now stand. They are connected above by

beams carved on the ceiling. On each side and at the back are cells, and in the middle of the last an antechamber with Elephanta-like columns leads to the shrine containing a seated figure of Buddha. The stair from this storey leads to the veranda of the upper storey, once carried by four columns, with chapels outside it and rooms at the end of it. The hall measures rather less than that of the lower storey, and is carried by twelve columns arranged round a central space. There are cells all round this hall also, and a shrine with a front chamber in the back wall.

The other (No. 7) is a vihara of unusual shape, in that it has no hall; the veranda, which is preceded by two porches borne by columns of the Elephanta type, leads directly to four cells and to the antechamber to the shrine; both the last are profusely decorated with sculpture. The statue represents Buddha, with his legs crossed under him, and his right hand raised to bless.

No. 8 is a small vihara, measuring 32 ft. by 17 ft. by 10 ft. It had two cells at each side and two at the sides of the antechamber of the shrine. It is of the same age as the next.

The Chaitya Cave, No. 9, which is one of the oldest of all the Buddhist caves of India, is 45 ft. deep, 22½ ft. wide, and 23 ft. high. In dimensions and in the decoration of its façade it much resembles the Nasik Chaitya Cave (p. 41), but is rather older in date than that. Fourteen plain octagonal pillars on each side separate the nave and aisles, and eleven more continue the colonnade round the dagoba at the end of the cave. The vaulted roof once carried wooden ribs; in front of it is the great horseshoe window, 11½ ft. high, with a terrace and rail in front of it, and a second terrace over the porch, with a guardian *dwarapala* at either end.

The dagoba is 11 ft. high to the top of its capital; this is in the form of a relic-box, and probably once bore a wooden umbrella. Remains of paintings are still visible on the left and back walls; on each pillar were once painted representations of Buddha, and on the roof of the aisles was painted a pattern of wooden compartments.

No. 10 is a still larger Chaitya, measuring 95 ft. by 41 ft. by 36 ft., and was also once fitted with wooden ribs, the roofs of the aisles having ribs carved in the stone. Its façade has fallen. The dagoba resembles that in No. 9, and, as in that cave, there are considerable remains of the paintings which once covered the walls. The costumes depicted in these resemble those of Sanchi (p. 165). Probably the oldest painting is the picture on the left wall of a king and queen and princess with women attendants watching the worship of the sacred Bodhi-tree.

No. 11 appears to have been remodelled. The roof of the veranda is painted with birds and flowers. The hall measures 37 ft. by 28 ft. by 10 ft., and is carried by four primitive columns. There is a bench along the right side. There are three cells on the left side, and two cells and a shrine in the end wall; in the shrine is a free-cut statue of seated Buddha, with a fine kneeling figure in front of it. On the left of the door are the remains of a painting of a standing Buddha on a dark background.

No. 12 is a vihara measuring 36 ft. square, with four cells on each of the three inner sides, and is probably of the same age as No. 9. The cells have two couches with stone pillars. Over their doors the upper wall is ornamented with a horseshoe type of canopy which resembles the window of a chaitya.

No. 13 is a small hall, 16½ ft. by 13½ ft. by 7 ft., with seven

cells, each with a stone couch, round it.

This completes the group of the older caves.

Cave No. 14, a vihara, is unfinished; it is reached above No. 13, and forms the third of the middle group of Mahayana works. No. 15, which belongs to the same group, has a hall 34 ft. square without columns, preceded by a veranda, and with six cells on each side; in the back wall are two cells and a shrine. The image of Buddha in the shrine is carved out of the solid rock.

Nos. 16 and 17 are held by some scholars to be the two finest viharas. With the Chaitya cave, No. 19, they date from about 500 A.D.

No. 16 has a veranda 65 ft. long and nearly 11 ft. wide, borne by six plain octagonal pillars; from the front of it steps descend to a chamber with a representation of a Naga Raja. Here also three doors and two windows open from the veranda into the hall, which is nearly 66 ft. square, and has twenty octagonal pillars, the roof of the front aisle being carved to simulate beams. On each side are six cells. The shrine, which is entered direct from the hall, and has side aisles separated off by two columns, contains in the centre a huge statue of Buddha in the teaching attitude. On the left wall of the hall is a beautiful painting of a dying princess, and others represent Buddha with a beggar's bowl, and teaching in a vihara. On the right wall, left of the door of the first cell, are the remains of a representation of Prince Siddhartha drawing the bow. The large scene on the back walls of elephants ridden by kings and escorted by musicians and soldiers, has been ruined by varnish.

No. 17 is very similar in size and arrangement to No. 16, but has an antechamber to the shrine, and two cells on either side of

the former. Over the central door to the hall are a row of painted Buddhas. There are only one side door and three windows. Between the veranda and No. 16 is a fine cistern. In front of the figure of Buddha in the shrine stand two figures, one with a mendicant's bowl. On the left of the door of the shrine is an extremely fine painting of the return of Buddha after his enlightenment, and his reception by his wife and son. On the ceiling of the N. end of the veranda is a much-damaged circular painting, in the compartments of which human beings and animals are represented; and on the back wall of the E. half is a painting of three females and a male figure flying through the air. The paintings on the side walls of the hall have been ruined by smoke. On the W. portion of the back wall is a picture with scenes in a court of justice, and hunting, and others in which a lion plays the principal part. On the right wall is a scene which has been supposed to represent the landing of Vijaya in Ceylon, and another of female demons devouring victims. No. 18 is merely a porch.

No. 19 is the third Chaitya cave, measuring 46 ft. by 24 ft. by 24 ft. high. It is therefore of very similar dimensions to No. 9, but, unlike it, is profusely decorated throughout. In front of it was a large court, most of which has fallen; but the porch at the back of the court under the great arched window still stands, and, like the whole façade, is covered with elaborate ornament. Five pillars on each side of the nave separate the aisles from it, and five more run round the dagoba. Outside the first two pillars of each colonnade is another, thus completing an aisle passage all round the cave. The columns have square bases and rounded shafts with bands of carving and bracket capitals

richly decorated. Above the columns on the wall under the curved roof were painted compartments of figures of Buddha, divided by floral arabesques. The roof has stone ribs carved under it. The front of the dagoba bears a figure of Buddha. Outside the cave to the W. is a relief of a Naga Raja, with a seven-headed cobra hood, and his wife.

No. 20 has a veranda, of which the roof is carved in imitation of rafters, and a hall 28 ft. by 25 ft.; the ante-chamber here projects into the hall.

The rest of the caves, from 21 to 29, complete the group of the later Mahayana caves, and lie considerably farther W. The veranda of 21, which has fallen, had at each end of it a chapel chamber with two pillars in front, with the earliest representation, as Dr Burgess believes, of the leaf falling over the corners of the capitals. The jewel or necklace pattern on the frieze above is characteristic of the work of the 7th century. The hall measures 51 ft. square, and has twelve columns; the image in the shrine is attended by huge *chauri* bearers. No. 22 is a small vihara of 16 ft. square; the image in the sanctuary is represented with its feet resting on a lotus. No. 23 is another vihara hall about 50 ft. square, with twelve pillars; the sanctuary is incomplete, but all four columns of the veranda are entire. No. 24 would have been the largest vihara of all, but was never completed. It shows how these caves were excavated by means of long galleries, which were broken into one another; the carving which exists is very elaborate. No. 25 is a small vihara hall 26 ft. by 25 ft.; the veranda, which has two pillars, opened on a court in front. No. 26 is the fourth Chaitya cave, and is very similar to No. 29. It is 68 ft. deep, 36 ft. wide, and 31 ft. high. The veranda, borne by four columns, here also opened on

to a court with sculptures on the sides of it, one on the east side representing the Buddhist Litany again. Over the veranda was a broad balcony in front of the great window, 9 ft. high; on each side of this are various sculptured reliefs of Buddha. A colonnade of twenty-six pillars forms the aisles, and runs round the dagoba at the back of the cave. The frieze above the colonnade is richly sculptured, and the roof is decorated with stone ribs. The walls of the aisles are also profusely decorated with sculpture; on the left wall, near the door from the veranda, is a colossal image of the dead Buddha, and farther down the wall is the relief of the temptation of Buddha by Mara. The dagoba has representations of Buddha all round it, and is over 20 ft. high. No. 27 is an unfinished vihara, which would have been 43 ft. wide and 31 ft. deep. No. 28, difficult of access, would have been a fifth Chaitya, of which only part of the great window has been excavated. No. 29 is inaccessible; only part of the veranda of it was ever completed.

ROUTE 4.

Manmar to Daulatabad, the Caves of ELLORA, Aurangabad, Jalna, and Secunderabad.

Manmar (Manmad), 162 m. from Bombay (p. 42).—The metre-gauge (Godavery Valley) section of the Nizam's Guaranteed State Railway, which has its terminal station here, connects with the Dhond-Manmar branch of the G.I.P. Rly. There are waiting and refreshment rooms at the station.

63 m. from Manmar is **Daulatabad*** (*Deogiri*), in the Nizam of Hyderabad's dominions. The railway passes near the S. side of the 13th-century fortress, built on a huge isolated conical rock of granite, 2250 ft. above sea-level, with a perpendicular scarp of from 80 ft. to 120 ft. all round. A fine view of three sides of it can be had from the train. Permission to visit the Fort (1 m. from station) must be obtained from the District Talukdar at Aurangabad or the Station Staff Officer at the same place. On the E. side of the fort were two outer lines of defence, and beyond these stood the walled city, now in ruins, and crossed from S. to N. by the road to Rauza and Ellora. On the left of the road stands the entrance to the outer line of defence, consisting of a hornwork with three gateways inside it, protected by a bastion 50 ft. high. Beyond the gate are (r) a Hindu temple with a lamp tower 13 ft. high; and (l) a small shrine of the Pir-i-kuds. On the latter side a little farther on are a large masonry tank, now dry, and a mosque converted out of a Jain temple, which has also served as a Hindu place of worship. Opposite these the Chand Minar or Pillar of Victory, a minaret of Turkish form, rises 100 ft.; it bears the date 1435 A.D. The inner line of defence is passed by a gate similar to that in the outer line, the first gate in both cases being defended by iron spikes against battering by elephants; and a steep flight of steps leads onwards to a third gate, giving access to a platform on the edge of the ditch, 40 ft. wide. On the right here is the *Chini Mahal*, with encaustic decoration, in which Abul Hasan Tana Shah, the last King of Golconda, spent thirteen years of imprisonment; close by on a bastion is a gun 21 ft. 10 in. long, called the *Kila Shikan*, or Fort Batterer. The moat is

crossed by a narrow stone bridge, at the end of which the road ascends to the Balakot by rock-cut chambers and passages, and emerges into the air 50 ft. higher up. The opening was formerly covered with an iron shutter, 20 ft. long and 1 in. thick, made in ribs (part of it is gone), which in case of siege was heated red hot. To provide ventilation for the fire a large hole has been tunnelled through the rock close by. Passing a gateway and the shrine of the Fakir Sukh Sultan, the path leads to a Baradari, or pavilion, from which there is a fine view. It is believed to have been the residence of the Hindu Princess of Deogiri, and was a favourite resort of the Emperor Shah Jahan in 1636. The pavilion has a wide veranda, with a precipice of from 100 ft. to 200 ft. in front, and a view to Aurangabad on the E. and to Rauza on the N. One hundred steps more must be climbed to reach the citadel itself, on a platform 160 ft. by 120 ft. At the W. corner is a one-gun battery, 60 ft. by 30 ft. The gun is 19 ft. 6 in. long, with a bore of 7 in. On a bastion is another large gun, on which is a Gujarati inscription, saying that the funds for its construction were provided by certain Banias, and also a Persian inscription, naming the gun "Creator of Storms." Tavernier says that the gun on the highest platform was raised to its place under the directions of a European artilleryman in the service of the Great Mughal, who was promised leave to return to his native land, if he could mount the gun on this spot.

Deogiri was the capital of the Yadava dynasty after the fall of the Western Chalukyas. In the year 1293 Ala-ud-din, afterwards Emperor of Delhi, took the city. The citadel still held out, and he finally raised the siege on receiving a ransom of 15,000 lb. of pure gold, 175 lb. of pearls, 50 lb. of diamonds, and 25,000 lb. of

silver. Twenty-one years later (1318) the Yadava Rajas were exterminated by Kutb-ud-din Mubarak Shah. In 1338 A.D. Muhammad Shah Tughlak removed the inhabitants of Delhi to Deogiri, strengthened the fortifications, and changed the name to Daulatabad; but his attempt to establish his capital in the Deccan ended in complete failure. Seventeen years later the exiles were permitted to return to Delhi, and the majority did so.

Daulatabad is the nearest station for the caves of Ellora (8 m. to Rauza, 2 more to the caves). On receipt of telegraphic advice the Station-master will arrange for the supply of conveyances by Messrs Nasserwanji, whose office is at Aurangabad (p. 83). Aurangabad is, however, a better station for the excursion than Daulatabad, where cars are not always available. It is impossible to see the caves properly in less than two days. The R.H.'s at Rauza (Khuldabad) are well furnished. There is also a staff of servants, and ordinary supplies are available, but a cook must be taken, also provisions.

It is possible to combine a visit to Ellora with one to the caves of Ajanta (p. 68), which are 85 m. from Aurangabad.

The road from Daulatabad to Rauza (8 m.) and the caves of Ellora ascends the steep hill called Pipal Ghat. It was paved by one of Aurangzeb's courtiers, as recorded on two pillars about half-way up the hill, where there are fine views.

Rauza or Khuldabad ("The Heavenly Abode") is a walled town, 2000 ft. above the sea, and is 2 m. from the caves of Ellora. It is the *Karbala* (holy shrine) of the Deccan Mussulmans, and is celebrated as the burial-place of many distinguished Muhammadians, amongst whom are the Emperor Aurangzeb and his second

son, Azam Shah; Asaf Jah, the founder of the Hyderabad dynasty, who died in 1748 at Burhanpur (p. 44); Nasir Jang, his second son; Malik Ambar, the powerful Abyssinian Minister of the last of the Nizam Shahi Kings; Abul Hasan Tana Shah, the exiled and imprisoned King of Golconda; and a host of minor celebrities.

Rauza once contained a considerable population, but the place is now in great part deserted. It is surrounded by a high stone wall (built by Aurangzeb) with battlements and loopholes. Old and ruinous mosques and tombs abound in every direction on each side of the road.

Midway between the N. and S. gates of the city is the grave of Aurangzeb in the Dargah of Saiyad Zain-ud-din, on the right side of the road. An ascent of 30 yds. leads to a domed porch and gateway. Some of the surrounding buildings are used as rest-houses for travellers, and one as a school. In the centre of the S. side is an exquisite little Nakkar Khana, or music hall, from the galleries of which music is played when festivals or fairs are celebrated. The W. side is occupied by a large mosque, the roof of which is supported on scalloped arches. Facing the N. end of the mosque is a small open gateway leading into an inner courtyard, in the S.E. angle of which is the door of Aurangzeb's tomb. Above the door is a semicircular screen of carved marble. The grave, which is uncovered, lies in the middle of a marble platform raised about half a foot from the floor. It is overshadowed by the branches of a tree (*Bukuli*) which bears sweet-smelling flowers; otherwise it is quite open to sun and rain, as it should be according to orthodox Muhammadan ideas. Aurangzeb, who was a man of austere piety, is said before his death to have desired that his sepulchre should be poor

and unpretentious, in accordance with the tenets of the Koran, and to have expressly "desired in his will that his funeral expenses should be defrayed from the proceeds of caps which he had quilted and sold, an amount that did not exceed Rs.10; and that the proceeds of the sale of his copies of the Koran, Rs.805, should be distributed to the poor."

Fifteen or twenty paces to the E. of Aurangzeb's tomb is a small quadrangular enclosure of marble, within which are three graves, the one on the right being that of the daughter of Saiyad Zain-ud-din, the Muhammadan saint buried close by; the next, that of **Azam Shah**, Aurangzeb's second son, attached to which is a small marble headstone carved with floral devices; and the one beyond, the grave of Azam Shah's wife. The whole is surrounded by a plain screen of white marble. Midway between these tombs and that of Aurangzeb is the mausoleum of Saiyad Zain-ud-din, on the E. side of which are inscribed a number of verses from the Koran and the date of the Saiyad's death, 1370 A.D. This tomb, however, was erected many years after that period by one of his disciples. The doors of the shrine are inlaid with silver plates of some thickness; the steps below it are embellished with a number of curiously cut and polished stones, said to have been brought here from time to time by Fakirs and other religious devotees of the shrine. A little distance to the rear of this tomb is a small room built in an angle of the courtyard wall, which is said to contain a robe of the Prophet Muhammad. It is carefully preserved under lock and key, and is only exhibited to the gaze of the faithful once a year—on the 12th Rabi-ul-awwal.

Opposite this Dargah, on the left side of the road, is that of Saiyad Hazrat Burhan-ud-din, with the

grave of Nizam-ul-mulk Asaf Jah, the first of the Nizams of Hyderabad. The entrance is through a large quadrangle, having open-fronted buildings on all sides, and a Nakkar Khana (music gallery) at the E. end. The W. end is used as a school for instruction in the Koran. A door at this end gives access to an inner courtyard in which are a number of graves. Facing the entrance are the tombs of Asaf Jah and Nasir Jang, his second son, surrounded by a lattice screen of red sandstone, and that of Saiyad Hazrat Burhan-ud-din, a saint who died at Rauza in 1344 A.D. He was the successor of Muntajib-ud-din, sent by Nizam-ud-din Aulia (p. 312), from Upper India with 700 disciples a few years before the first invasion of the Deccan by Ala-ud-din (1294), and was succeeded by Zain-ud-din. Deposited within the shrine are some hairs of the Prophet's beard, which are said to increase yearly in number. The shrine, however, boasts of a still more remarkable treasure. On the pavement to the S. of the building, small lumps of silver are shown. These are supposed to be the remains of trees of solid silver, which grew miraculously after the saint's death and were broken up and sold for the maintenance of the shrine. Subsequently, a small jaghir was allotted to the disciples of the Saiyad, and since that time only a few buds of silver appear at night. The doors of the shrine are covered with plates of white and yellow metal wrought into designs of trees and flowers.

Among the tombs between these two shrines and the Ellora D.B. are those of Saiyad Raju Kattal, Malik Ambar, and the last king of Golconda. The D.B. is situated above the cliff in which the

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are, and the descent begins immediately beyond it. It is now

possible to motor to the entrance, since the opening in 1925 of an excellent road, on the occasion of the visit of Lord and Lady Reading.

The Ellora group of Cave Temples is the largest and most varied of all, and comprises twelve Buddhist, seventeen Brahman, and five Jain works. The road down the Ghat passes the south side of the Kailasa Temple, and divides the caves into two groups of twenty to the left and fourteen to the right of it. The Buddhist caves lie at the S. end and the Jain caves at the N. end of the hill face, which is nearly $1\frac{1}{2}$ m. long, the Brahman caves and Kailasa being situated between the two groups. A Curator appointed by the Hyderabad State Archæological Dept. attends the visitors. Besides the D.B., which is available for the use of visitors, there is a State guest-house which may be occupied by leave of the Director of Archæology at Hyderabad, from whom a permit must be obtained. Application for permission to photograph or sketch the interior of the caves must be made in the same quarter. The Archæological Department has published a reproduction, in pamphlet form, of Dr Burgess's detailed account of the caves, which can be obtained (Rs.2) at Daulatabad station.

"Architecturally," writes Fergusson,¹ "the Ellora caves differ from those of Ajanta, in consequence of their being excavated in the sloping sides of a hill and not in a nearly perpendicular cliff. From this formation of the ground almost all the caves at Ellora have courtyards in front of them. Frequently also an outer wall of rock with an entrance through it is left standing, so that the caves are not generally seen from the outside." They are mentioned by

Masudi, the Arab geographer of the 10th century, as a celebrated place of pilgrimage; and Thevenot, who visited them about 1667, has left an interesting description.

Buddhist Caves.—The first of these, to the S. of the Ghat road, and lying beyond three Brahman caves, is known as the Tin Thal (No. 12) or Three-Storied, and the farthest group at the S. end is named the Dherwara or Outcasts' quarter; the date of the latter extends from 350 to 550 A.D., and of the former from 650 to 750. No. 1 is a vihara (monastery), measuring $41\frac{1}{2}$ ft. by $42\frac{1}{2}$ ft., and having eight cells round it. No. 2, which was a hall for worship, is approached by a flight of steps, and is reached through a veranda carved with figures and having large *dwarapalas* (guardians), at the door of the cave, which is flanked by a window on either side. The interior measures 48 ft. square, and has a raised lateral gallery on each side; the roof is supported by twelve columns arranged in a square, with high bases and cushion capitals, and the two galleries have four pillars in front of them—all richly decorated. A shrine, with huge *dwarapalas* and a colossal seated Buddha in the centre of it and two standing Buddhas on either hand, occupies the middle of the back wall, and on each side of the shrine is a double cell elaborately carved. No. 3 was also a vihara, measuring 46 ft. square, and having twelve cells round it; the twelve columns which support it have a drooping leaf or ear over their circular necks. In the N. end of the veranda is a chapel with a Buddha seated on a lotus supported by snake-hooded figures, and on the right of this is a pictorial litany. No. 4 is a much-ruined vihara, now measuring 35 ft. by 39 ft. deep. At the inner end is a cross aisle, beyond which a shrine,

¹ *Indian Architecture*. See also the chapter in *L'Inde sans les Anglais*, by Pierre Loti (1903), entitled "Les Grottes Epouvantables."

with a statue of Buddha under the Bo-tree and two cells were excavated; the columns are similar to those in No. 2. No. 5, known as the Mahanwada, and formerly as the Dherwara cave, is again reached by steps. It is the largest single-storeyed vihara cave here, measuring $58\frac{1}{2}$ ft. by 117 ft. deep. The roof is carried by two rows of ten columns, similar to those in No. 2, with two more between them at each end, and two stone benches run down the cave parallel to the ranges of pillars. On either side of the cave is a recess with two pillars and a number of cells, and at the end is a shrine. From its peculiar arrangement it has been conjectured that this cave was a hall of assembly. No. 6, to the N. of No. 5, is reached through a lower hall with three cells on the E. side; it measures $26\frac{1}{2}$ ft. by 43 ft., and has an ante-chamber and shrine at the back of it; the former richly carved, and the latter containing a large seated Buddha. The figure on a stone at the foot of the goddess Saraswati on the S. wall of the ante-chamber deserves notice. Beyond it is yet a third hall, measuring 27 ft. by 29 ft., with three cells on the E. and N. sides. No. 9 lies in the N.W. angle beyond the third hall, and is reached from the central hall of No. 6; it has a well-carved façade. No. 7, to which the stairs in the first hall of No. 6 lead, is a large vihara, $51\frac{1}{2}$ ft. by $43\frac{1}{2}$ ft., supported by four columns only. No. 8 is entered from this, and is a hall measuring 28 ft. by 25 ft., with three cells on the North side, a shrine with a passage round it, and a seated image of Buddha in it, and a smaller hall on the W. side. On the face of the rock by this is a group of the child Buddha with his mother and father. The next excavation, No. 10, is the only chaitya or chapel cave of the group, and lies some way to the N. It is known as the Viswakarma or Carpenter's cave, and is consid-

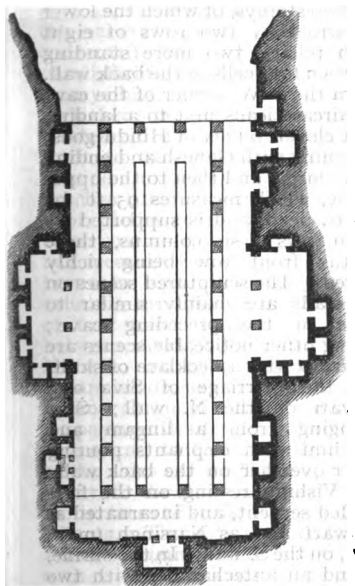
ered to date from the end of the 7th century A.D. Fergusson (*Ind. Arch.*, I, 204) takes 600 A.D. as the medium date for the Viswakarma and its surroundings, and 750 A.D. as the time when Buddhism began to wane in W. India, but waits for inscriptions and other precise data. In front of it is a large court, which is reached by steps, and from which a second flight of steps leads to the veranda. The galleries round the court are borne by elegant pillars, and at the foot of each of these was a fine stone lion facing outwards. At the back of the side galleries are two chapels elaborately carved, and at the ends of the back gallery or veranda are two chapels with two columns in front of them and two cells. The fine railed terrace above the veranda is reached by a flight of steps in the N. gallery. The façade is surmounted by a bold projecting cornice cut in the rock, and the great horseshoe window is here divided into lights. The interior measures 86 ft. by 43 ft. by 34 ft., and the nave and aisles, which run round the dagoba, are separated by twenty-eight columns. The dagoba is 27 ft. high, and has a colossal seated Buddha in the front of it. The roof is carved in imitation of ribs, and the projecting wall under it and the above columns is carved with two rows of panels, the upper with Buddha and the lower with representations of ganas or dwarfs. Farther N. is the Do Thal¹ cave (No. 11), which was subsequently discovered to have three storeys; it is also preceded by a court. The lowest storey consists of a veranda only, with a shrine and two cells at the back of it. The middle storey has eight pillars in front and five chapels or cells, of which only the three richly-carved ones in the middle are completed. The centre chapel is a small hall with two pillars and a statue of Buddha in the shrine. N. again of the Do

¹ Do Thal = Two storeys.

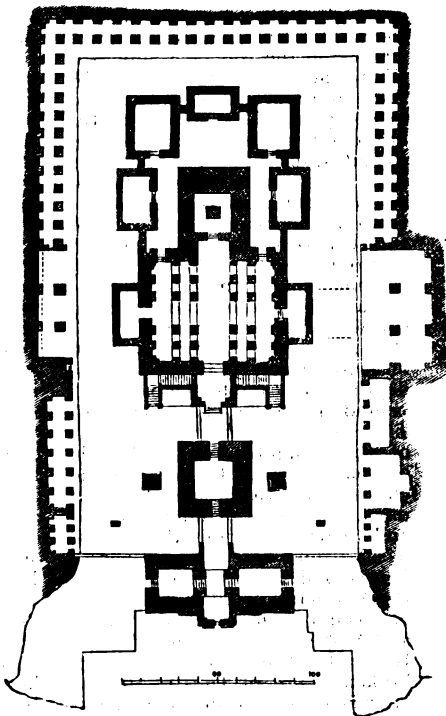
Thal is the Tin Thal¹ cave (No. 12), dating probably from about 700 A.D. This again has a fine fore-court (a feature which adds great picturesqueness to the Ellora caves), but in this instance without side galleries. Steps lead from the court into a great hall, 115

chauvi bearers is repeated in many places.

Steps at the S.W. corner of the front hall lead to the middle storey, borne by two rows of eight pillars. The shrine is elaborately carved, and two fine *dwarapalas* guard the door. The topmost floor



The Mahanwada or Dherwara Cave.



The Kailasa Temple.

ft. by 43 ft., with three rows of columns; beyond this a second hall, 42 ft. by 35 ft., borne by six columns, extends up to the shrine, with a seated statue of Buddha on either wall. The shrine contains a colossal seated Buddha and a number of other figures. On the walls of the front hall a relief of Buddha with attendants and

¹ Tin Thal = Three storeys.

is carried by five rows of eight columns, the hall measuring 115 ft. by 70 ft. Along both side walls are large figures of Buddha seated on a throne, and on the back wall are the seven human Buddhas, seated under trees at the one side and under umbrellas at the other. The antechamber, which is very large and has two pillars, is sculptured all round with large figures;

in the shrine is a very large squat Buddha.

Brahman Caves.—Fifty yds. N. of the Tin Thal Cave begins the group of sixteen Brahmanical caves, or seventeen including the Temple of Kailasa. The first of these is a plain room only; next comes the Ravan ka khai,¹ and then the Das Avatara, between which and the Kailasa temple the Ghat road reaches the plain. All these were probably constructed in the 7th and early part of the 8th centuries A.D., the temple being the latest in date. The Ravan ka khai presents a very different arrangement from that of any of the Buddhist caves. At the entrance were four columns making a front aisle; behind, twelve columns enclose the central space of the hall; and beyond these is a shrine standing free at the end of the hall. The pillared portion measures nearly 55 ft. sq., and the depth of the cave to the back wall behind the shrine chapel is 85 ft. The S. wall bears Saiva sculptures of the slaughter of the buffalo demon, Siva and Parvati playing chess, and Siva dancing the tandava, Ravana shaking Kailasa and Bhairava;² while the N. wall has Vaishnava representations of Durga, Lakshmi, wife of Vishnu, the Varahani, or boar incarnation of Vishnu, a four-armed Vishnu, and Vishnu seated with Lakshmi. Inside the shrine is an altar and a broken figure of Durga; in the passage outside it on the S. side is a group of three skeleton demon gods, Ganesh and the seven great goddesses, each with a child, and her cognisance below—viz., Chamundi³ and owl, Indrani and

elephant, Varahani and boar, Lakshmi and Garuda eagle, Kaumari and peacock, Maheswari and buffalo, Bráhmī and hans or goose. The Das Avatara¹ cave is next reached by a considerable flight of steps in the rock. It stands at the end of a large court hewn in the rock, which in this instance has a chapel in the middle of it and smaller shrines and cisterns round it; inside the chapel are four columns on a platform which perhaps once had an image of a bull (nandi) on it. The cave has two storeys, of which the lower is carried by two rows of eight plain pillars, two more standing between four cells in the back wall. From the N.W. corner of the cave a staircase leads first to a landing with eleven reliefs of Hindu gods, beginning with Ganesh and ending with Durga, and then to the upper storey, which measures 95 ft. by 109 ft. deep, and is supported by seven rows of six columns, those in the front row being richly carved. The sculptured scenes on the walls are mainly similar to those in the preceding cave; among other noticeable scenes are Bhairava with a necklace of skulls and the marriage of Siva and Parvati on the N. wall; Siva springing from a lingam and Lakshmi with elephants pouring water over her on the back wall; and Vishnu, resting on the five-hooded serpent, and incarnated as a dwarf and as Narsingh (man-lion), on the S. wall. In the shrine, behind an antechamber with two columns, was a lingam or emblem of Siva.³

¹ Dás Avatara = Ten Incarnations.

² A Thug confessed to Col. Meadows Taylor that the caves at Ellora contained all the mysteries of his profession, and that every particular of the murderous methods of Thagi (Thuggee) was depicted on the walls, from the marking down of the victim to the burial of the body in a hidden grave. For an account of the proceedings of this hereditary guild of assassins who justified their strangling of human beings as a sacrifice to the goddess Kali (Bhowani, Durga), Meadows Taylor's *Confessions of a Thug*

¹ Ravanka khai = Excavation of Ravana.

² See p. 30.

³ The name of this goddess, a specially ferocious form of Durga, is derived from the two giants Chanda and Munda, whom she slew. She wore an elephant hide and a necklace of corpses, and used to rejoice in human sacrifices. See play of Malati and Madhava in Wilson's *Theatre of the Hindus*.

The **Kailasa Temple** has been classed by Sir John Marshall with the Black Pagoda at Kanarak (p. 514), as the noblest Hindu memorial of ancient India. It is a marvellous structure after a Dravidian model, shaped and carved wholly out of rock *in situ*. The back wall of the court-pit in which it stands is over 100 ft. high, and the court itself is 276 ft. long and 154 ft. broad. A rock screen, pierced by a fine entrance passage, closes the court on the W. side; near it stand two gigantic stone elephants. Between the screen and the temple, and connected with both, is a fine nandi shrine, 26 ft. square and two storeys high, with a stone flagstaff on either side; and beyond this is the temple, measuring 164 ft. from front to back and 109 ft. from outside to outside of the side porches, and rising 96 ft. above the floor of the court. It consists of three parts—a porch, a central hall measuring 57 ft. by 55 ft., and borne by sixteen massive square columns arranged in four groups of four each, with broad aisles between, from W. to E. and from N. to S., and a dark shrine, 15 ft. square inside, with the Ganges and Jumna as guardians at the door. A passage leads all round the shrine and to five chapels placed at the sides and back of it; these illustrate the shape of the cells on the terraces of structural Buddhist viharas. The solid basement on which the temple stands is carved with a splendid series of immense elephants and monsters projected from the wall, and forms quite one of the finest remains of antiquity in the whole of India. At the sides of the bridge connecting the porch and nandi chapel, and of the staircases leading to the former, are large sculptures and reliefs,

the latter representing scenes from the *Ramayana*. On the S. side of the court opposite the porch is a rock-cut gallery, borne by two columns, with statues of the seven great goddesses and Ganesh. E. of this is a plain cave, 55 ft. by 34 ft., borne by four pillars, and with a veranda, also with two columns. There is also an upper storey to this cave, once connected with the temple by a flying bridge, under which, on the temple wall, is a relief of Ravana shaking Kailasa. From this point the E. half of the court round to the N. side porch of the temple is encircled by a corridor cut in the rock, with twelve large compartments of sculpture on the S. side, nineteen on the E., and twelve again on the N., representing various Saiva and Vaishnava scenes. The view of the temple from under the great cliff at the E. end is extremely impressive. W. of the N. corridor is another, but plain, one, under the large Lankeswar cave. This is 108 ft. by 60 ft., exclusive of a nandi chapel in front of it, and is reached by a dark winding staircase from yet a fifth corridor W. of the fourth. The cave is borne by sixteen pillars arranged as in the Kailasa temple, and by two rows of five and four more columns on the outer edge of the S. and W. sides; two in front of the shrine completing the whole number of twenty-seven; between the columns of the outer lines is a sculptured rail, and in the back aisle of the cave are a number of large sculptured scenes. At the sides of the door to the shrine are female guardians; the altar inside has been broken. In the N.W. corner of the court is a small cave shrine with two pillars in the front decorated with representations of the three river goddesses of the Ganges, Jumna, and Saraswati; and above this is a small unfinished excavation.

A footpath near the N. side of

(Oxford Univ. Press) should be read. Active operations against this criminal fraternity were begun by Sir William Sleeman and others in 1829, but it was not until 1861 that most of the gangs were dispersed.

Kailasa leads up to the plateau past a cave with a Trimurti, or Triad figure of Siva, in it (p. 29). Farther N. are four unimportant Brahman caves, beyond which the Rameswara cave is reached. This is a Saiva temple, once with a porch in front of it, borne by three rows of four pillars very varied in design; it has but few carved scenes. A corridor formerly ran round three sides of the forecourt. The next important cave is known as the *Nilkantha*; it has a small ruined chapel in the forecourt, from which thirteen steps lead into the cave, measuring 70 ft. by 44 ft. In the shrine is a lingam. The *Khumbarwada* cave, 95 ft. by 27 ft., including the smaller hall at the back, has a figure of the sun god in his seven-horse chariot in the vestibule to the shrine. The next temple is a large hall with several chapels, measuring 112 ft. by 67 ft., and supported by columns of the *Elephanta* type; at the door of the shrine are very large *dwarapalas*. The path now reaches a fine ravine, over the scarped head of which a waterfall descends after rain. On the S. side of this is the *Vaishnava*, *Milkmaid's*, or *Gopi* cave, and on the N. side the cave named *Sitaki Nahani* (or bath). The veranda of the former is ruined, but on the back wall of it pierced by a door and four windows, are various carved scenes; the inner hall measures 53 ft. by 22 ft. The second is an extremely picturesque excavation, which will remind every one of the great cave at *Elephanta*, believed to be slightly more modern than this, which dates from about 650-725. It consists of a principal hall, facing nearly W., with a recess on the S. side opening on to the ravine, and a larger recess of irregular shape on the N. side. The central hall measures 149 ft. in depth and 95 ft. in breadth, including the two side aisles, which lead to the recesses, and is borne

by four rows of four columns, the two eastward of the middle rows being merged in the walls of the free shrine, while two more stand at the W. end of these rows and correspond with those at the sides of the entrance. The steps to this are guarded by two lions, and in front of them is a circular platform for a *nandi*. In the veranda and front aisles of the cave are carved reliefs much as at *Elephanta*. The shrine is a small square room, approached by four doors as in that cave, and contains a lingam. From the S. recess steps descend to the ravine, of which a charming view is obtained at this point. The N. recess is also reached by steps guarded by lions; a small low cave exists at the E. end of this, and from the S.W. corner of the recess a passage has been broken into an excavation with six pillars; there is usually water in this wing, which prevents any close examination of it.

Jain Caves.—The five Jain caves, dating from the 8th to the 13th century, lie about 200 yds. beyond the most northerly of the Brahman caves, the first being the *Uhhota Kailasa*, some way up the face of the hill. This temple is in a pit measuring 130 ft. by 80 ft., and has a hall 36 ft. square, borne by sixteen columns, and a shrine 14½ ft. by 11½ ft. It was imitated from the great *Kailasa* temple, and left incomplete. The *Indra Sabha* is entered through a rock screen facing S., in front of which, to the E., is a temple with statues of *Parasnath*, *Gomata Swami* with creepers round his limbs, and the last *Tirthankar*, *Mahavira*. In the S.E. corner of the court is a large elephant, and opposite it was a monolithic column, in front of a cave with six columns, containing reliefs of the same three *Tirthankars*. In the centre of the front of the court is a chapel with a quadruple image of a Jain saint; at the back of the

court is an incomplete hall borne by twelve columns, with two more between the S. and N. colonnades and the veranda and shrine. Over this, reached by a staircase in the veranda, is a second hall with wings to the front of it, each with a small temple borne by four columns. The hall, measuring 55 ft. by 65 ft., is supported by twelve pillars, in the centre of which was once an image; the walls all round are divided into compartments filled with Jain saints, and the shrine has a statue of Mahavira. The figures at the ends of the veranda are noticeable, also the cornice round the shrine door. The *Jagannath Sabha*, a little farther on, is also a double cave with a court in front of it. On the W. wing of this is a small hall, and at the side of the main cave is a small chapel. The cave is supported by four columns in front and by four more inside; the sculptures in it are in an unusually perfect condition. The outside staircase to the upper storey leads to another hall, 55 ft. by 45 ft., the ceiling of which was once painted in concentric circles, and the walls of which are sculptured with figures of Mahavira and Parasnath. This cave connects internally with the *Indra Sabha*, and also with another to the W. of it consisting of a veranda with two columns and a small hall with four. On the top of the hill in which the Jain caves are excavated is a rock-hewn statue of Parasnath 16 ft. high, protected by a structural building raised over it some 200 years ago.

71 m. **Aurangabad** (D.B.; small, but good, just outside the station). This thriving city in the Nizam's Dominions (pop. 36,876), has a considerable trade in cotton and wheat. It was first called Khirki, and was founded in 1610 by Malik Ambar, the head of the Abyssinian faction in the Ahmadnagar State.

Although the caves of Ellora are only 10 m. from Daulatabad station and cars can be sent out there from Aurangabad, the excursion is more conveniently made from Aurangabad (13 m.), taking Daulatabad and Rauza on the way. Motors are available for hire at Aurangabad station. Messrs Nasserwanji also provide cars for the journey (60 m.) to the caves of Ajanta (p. 68). The town lies to the E. of the British Cantonment. 1 m. N.E. of it is the grand **Mausoleum of Rabi'a Daurani**,¹ wife of Aurangzeb. The great door at the gateway is plated with brass, and along the edge is written, "This door of the noble mausoleum was made in 1089 A.H., when Ataullah was chief architect, by Haibat Rai." Near the inscription is an infinitesimally small figure, which is said to be a bird, indistinctly carved, and there is a similar carving on the door of the mausoleum itself. It is a common local joke, when any man asserts that he has been to this mausoleum, to ask if he saw the bird there, and if he answers in the negative, to dispute his having seen the mausoleum at all. The curious roof of the gateway of the mausoleum should be observed. In the garden is a long narrow basin of water, in which fountains used to play, and on either side of the water is a walk and ornamental wall. This beautiful building is a replica of the Taj Mahal at Agra, and the finest Mughal monument in the Deccan. Its main fault is the want of sufficient height in the entrance archway. In the wall of the mausoleum is a second but much smaller door, only 6 ft. high, plated with brass, where the second bird is pointed out on the edge close to the upper central knob. The carving of the flowers on this door is curious, and that of the dragons particularly so. Those

¹ By some writers the lady is said to have been a daughter of the Emperor, which is a mistake. The gravestone is nameless.

who wish to enter the tomb are expected to take off their shoes. The cenotaph is enclosed in an octagonal screen of white marble lattice-work exquisitely carved, and stands on a raised marble platform.¹ The place for the slab is empty, and nothing but earth appears. This is much approved by Moslems, as showing humility. In the gallery above the tomb is a marble door exquisitely carved. The Government of the Nizam has gone to great expense in restoring this mausoleum. Below the right corner of the platform is a second tomb, said to contain the remains of Rabi'a Daurani's nurse. There is no inscription. To the W. of the mausoleum is a mosque of brick faced with cement (*chunam*) of a dazzling whiteness. The pavement is covered with tracings of prayer-carpets. The *mimbar*, or pulpit, is of marble.

The *Pan Chakki*, or water-mill, the shrine of Baba Shah Muzaffar, a *Chishti* (p. 222) and spiritual preceptor of Aurangzeb, is perhaps the prettiest and best-kept shrine in this part of India. It is situated on the right of the road from the Cantonment to the Begampura bridge, and on the very edge of the Kham, the river of Aurangabad. In the garden is a brimming tank of clear water, full of fish from 1 ft. to 3 ft. long, of a species called *Khol*. This tank overflows into a lower one, and that again into a narrow conduit. Beyond the first tank and the ornamental garden is a second and much larger tank. It is entirely supported on vaults, with two rows of massive pillars. Below is a noble hall, reached by steep steps, down to the level of the river. On the right of the second tank is a fine mosque, the roof of which is supported by four rows of massive pillars. In two of

the rows the pillars are of teak, and in two of masonry. At the S.W. corner of this mosque, in a little garden, is the diminutive Tomb of the saint, of beautiful light-coloured marble.

$\frac{1}{4}$ m. N. from the *Pan Chakki* is the *Mecca Gate* of the city and the *Mecca Bridge*, which are probably some centuries old. The top of the parapet of the gateway is 42 ft. above the road which passes over the bridge. The flanking towers are surmounted by domes. Inside the gate there is a black stone mosque built by Malik Ambar. In the centre is a niche with the Divine Name, and "Victory is near." Above that is the *Kalima* and some verses of the Koran written in difficult Tughra. Close by is a recess with a bell-shaped ornament. This is perhaps the oldest mosque in the city.

The Government Offices are 2 m. to the S.E. of the Cantonment, and in or near the *Kila Arh* or citadel, built by Aurangzeb. This spot not long ago was entirely covered with cactus and jungle, the haunt of hyenas and other wild animals. It was, however, the site of gentlemen's houses in the reign of Aurangzeb, when Aurangabad was the capital of the Deccan. Sir Salar Jang ordered the site to be cleared, and, when this was done, numerous reservoirs, fountains, and other works of interest were discovered. These have been repaired, and the wilderness has literally been changed into a garden. Only one archway of Aurangzeb's citadel remains, but here fifty-three great Princes, such as the Maharajas of Jaipur and Jodhpur, attended the court of the Emperor with thousands of armed retainers, and Aurangabad was then the Delhi of the South. As soon as Aurangzeb died the Princes departed, and Aurangabad sank at once into comparative insignificance. The *Jami Masjid* is on the right of

¹ Tavernier mentions this tomb in his travels, and states that he met carts coming down from N. India with white marble for it.

the road, amid a grove of some of the finest trees in India. One immense *Ficus Indica* (banyan) stands close on the road, and shades some 300 ft. of it. The Mosque and minarets are low, but the façade is rendered striking by an ornamental band of carving 2 ft. broad along the whole front. Over the central niche are the *Kalima* and inscriptions in Tughra writing, as in Malik Ambar's Mosque. This mosque is wonderfully well kept, and (what is not seen anywhere else), a net covers the entire façade, so that no birds or other creatures can enter. Malik Ambar built half this mosque and Aurangzeb the other half.

The Caves of Aurangabad are beyond the N. outskirts of the city near Rabi'a Daurani's mausoleum. A road has recently been constructed which goes right up to the foot of the hill, wherein the caves are excavated. The nine Buddhist caves here are the latest of all Buddhist works in India, and date principally from the 7th century; there are five in the W. group, and four in the other lying $\frac{1}{2}$ m. farther E. No. 1, at the W. end of the first group, is a vihara, a good deal higher up than the other four caves adjoining it. Only the porch and veranda (76 $\frac{1}{2}$ ft. by 9 ft.) were completed, and the former has been crushed by the fall of a mass of rock; the hall was intended to be one of twenty-eight pillars. No. 2 was intended to be a hall for worship only. At the back of the veranda, 21 $\frac{1}{2}$ ft. by 13 ft., is an aisle, and behind this is a shrine with a passage all round it; at the sides of the shrine door are two tall figures standing on a lotus flower and *nāga* figures, and inside is a seated figure of Buddha, 9 ft. high, in the teaching attitude. Many reliefs of similar figures are on the walls of the shrine and the passages. No. 3 is a vihara hall, 41 $\frac{1}{2}$ ft. by 42 $\frac{1}{2}$ ft., with twelve columns splendidly decorated as

in the later caves at Ajanta; there is a decorated recess also, and on each side two cells. In the front corners of the shrine are a number of life-sized worshipping figures with garlands and elaborate head-dresses. No. 4 is a chaitya or chapel cave, much ruined. It was only 38 ft. long and 22 $\frac{1}{2}$ ft. broad, and was carried by seventeen plain columns; the dagoba was nearly 6 ft. in diameter. It dates probably from the 1st or 2nd century. Of No. 5 only the shrine remains, now dedicated to the Jain Parasnath. No. 6, the first of the E. caves, is again much higher up the hill face than the other three caves in that group. The hall was supported by four columns, and the antechamber of the shrine by two more; in the side walls are four cells, and in the back wall two. The shrine has a passage round it, and a smaller Buddha with smaller worshippers in front. There are traces of painting on the roof of the front of the cave. No. 7 has a veranda with four columns and a chapel at either end, and a hall 38 ft. by 28 ft., in the centre of which the shrine has been placed, while three cells have been excavated in each side wall, and two chapels with sculptures in the back wall. To the left of the entrance to the hall is one of the best representations of the Buddhist Litany (p. 70); to the right is a figure of Manjusri, patron of the Mahāyana sect. The front of the shrine has three large female figures on either side; on the left of the figure of Buddha in the shrine is the representation of a dance and of female musicians. No. 8 consists of a ruined lower storey and an incomplete upper storey, with a hall 27 ft. by 20 ft. No. 9 is also higher up in the cliff. It consists of a long veranda hall with three chambers and shrines opening from it. On the W. wall is a sculpture of the dead Buddha 16 ft. long. The sculptures and arrange-

ments of these caves show a distinct approximation to the Brahman caves of Ellora.

28 m. S. of Aurangabad by road is **Paithan**, one of the oldest cities in the Deccan, on the N. bank of the Godavari. Mention is made of its inhabitants in the 14th Edict of Asoka. The modern town is a trading centre of some importance.

110 m. from Manmar is **Jalna** (D.B.) (pop. 16,912), which was from 1827 to 1903 an infantry cantonment. Motor service to Malkapur (p. 136) *via* Buldana. Jalna was the place of exile of Abul Fazl, the author of the *Ain-i-Akbari*; and Aurangzeb, when Viceroy of the Deccan, also lived here. The fort, now used as a bazar, contains a well with underground chambers. From Jalna the battle-field of **Assaye**, 30 m. distant, may be visited in the inside of a day, if arrangements are made beforehand by taking a motor car or for a tonga and two relays of horses on the road, through the Tonga Mail Agent of the place (Rs.6 per day). Several old forts, such as once covered all the Deccan, are passed *en route*, and the two fortified villages of Pipalgaon and Warur on the Kaitna river, which showed the Duke of Wellington where the ford was, still stand on either side of the stream. A fine view of the field of battle fought on 23rd September 1803 is obtained from the tower of the fort of the village of Assaye, on the bank of the Juah, between which and the Kaitna the Mahratta army was drawn up after it was compelled by the British manœuvre to change front from the line of the Kaitna, which it originally faced. The forces of Scindia and of the Bhonsla Raja of Nagpur consisted of 16,000 infantry and 20,000 cavalry, and the British force of 4500 men all told; the killed and wounded on either side were 12,000 and 1600.

N. of it lies the spot where the British who fell in the battle were buried.

187 m. **Pingli**. From this station the deserted cavalry cantonment of **Mominabad** (Amba) can be reached (42 m.). Near by are some ruined cave temples, both Brahmanical and Jain.

199 m. **Purna** (R.). Junction for a branch line to **Hingoli** (50 m.) which was an important cantonment from 1819 to 1903. Some of the graves in the British cemetery date back to 1829. Hingoli was one of the main centres of the Thugs, or professional stranglers, and is mentioned by Meadows Taylor in his *Confessions of a Thug*. About 9 m. from **Chondi** stn. (21 m.) on this line (good road) is the Naganatha temple at **Aundha**; a splendid example of mediæval Hindu architecture, closely resembling the temple at Halebid (p. 596). The carving on the black granite base is very fine.

218 m. **Nander**. An important commercial town. About 1 m. from the station is a famous Sikh temple, or gurudwara, which contains the richly ornamented tomb of Guru Govind, the last of the ten Gurus (p. lxviii), who was assassinated near Nander in 1708. Europeans are permitted to enter the temple and sit on a special carpet. A training college for young Sikhs is maintained here.

294 m. **Dichpalli**. The Vishnu temple on a hill near the stn. is another fine specimen of the mediæval Hindu style, with wonderful stone carving.

386 m. from Manmar is **Secunderabad** (p. 568).

ROUTE 5.

BENARES AND SARNATH.

BENARES * (D.B., Hotels), headquarters of a division and district in the United Provinces (pop. 198,447), is situated in lat. $25^{\circ} 18'$, long. $83^{\circ} 3'$, on the left bank of the river Ganges, which flows here from S. to N. and N.E. The **Cantonment** station, at which the visitor will alight, is an important railway junction, 429 m. from Calcutta by the Peshawar mail route (Route 20), 940 m. from Bombay *viâ* Mughalsarai (Route 2) and 76 m. from Allahabad by the Bengal and N.W. Rly. (which continues E., 22 m., to Aunrihar Jn., and thence, 37 m., to Jaunpur, and also, 47 m., Ghazipur, and 122 m., *viâ* Gonda to, 217 m., Gorakhpur). The Ganges forms a bay or crescent-shaped reach in front of the city; and a fine view of the long line of bathing-ghats and temples can be enjoyed by the visitor, who makes his entrance across the Dufferin Bridge (p. 97) from Calcutta or Bombay by way of Mughalsarai. The sight is particularly impressive in the early morning; as the river front faces E., the view is apt to be misty in the afternoon, especially in the cold weather.

Originally *Vārānasi*, and commonly called Kashi by the Hindus, who add the suffix *Ji* as a mark of respect, Benares has been the religious capital of India from beyond historical times. It is mentioned in both the *Mahabharata* and *Ramayana*, and was officially known in the 18th century as Muhammadabad (but the name did not endure). The most generally accepted derivation of the name *Vārānasi* is from the streams *Vārāna* (modern Barna) and *Asi*, the former a river of some size on the N. and W. of the city, the

latter a rivulet, now a mere *nalla*, embraced within its area. The present city lies wholly between the Barna and the Asi, and thus gives an air (perhaps spurious) of probability to the above derivation. In old days the Asi was well away from the city, which has grown in that direction in modern times.

Benares is one of the Seven Sacred Cities of the Hindus,¹ and is the great northern centre of the worship of Siva. The annual number of pilgrims who visit it is not less than 1,000,000, while the number of Brahmans residing in the place is over 30,000. Every pilgrim, besides visiting the various holy spots in the city, must make the circuit of the **Panch Kosi** road, unmetalled, outside the city, round the sacred territory of Benares, commencing at the Manikarnika Ghat, proceeding by the Asi Ghat, and returning by the Barna Ghat (see p. 97). The route, which is $36\frac{1}{4}$ m. in length, and the pilgrimage of which occupies six days, is picturesquely lined by fine trees and small shrines. The end of each stage is marked by a picturesque village, with numbers of temples and small *dharmshalas*. Benares is said to combine the virtues of all other places of pilgrimage, so much so that any one of whatever creed, and however great his misdeeds, dying within the compass of the Panch Kosi road, is transported straight to heaven. This belief leads many people to end their days at Benares. Its peculiar sanctity is derived from the 'ten-horse sacrifice,' referred to under Dasas wamedh Ghat (p. 97.)

The site of Benares has often been changed. The past history of this, one of the most ancient cities in India, is involved in

¹ The other six are Hardwar, Ujjain, Mathura (Muttra), Ajodhya (in Oudh), Dwarka (in Kathiawar) and Conjeeveram (in S. India).

obscurity. The Chinese travellers Fa-Hian and Hiuen Tsang visited it in 399 A.D. or 629-645 A.D. respectively. The latter mentions about 100 temples sacred to Siva, with 10,000 votaries. In past ages it has been a city of sanctity and learning, the home of philosophers and grammarians. It is, however, certain that it was a most flourishing and important place six centuries before the Christian era, for Sakyamuni (Buddha) who was born about 563 B.C. and died in 483 B.C., came to it from Gaya to establish his religion, which he would not have done had it not been then a great centre. Many important writers of the Hindus are first heard of at Benares. Of intermediate events little is known, but the place was raided in 1033 by a lieutenant of Mahmud of Ghazni. We learn from Hasan Nizami's history that in 1194 A.D. Jaichand, Raja of Benares, "whose army was countless as the sand," was defeated and killed by Kutb-ud-din, the general of Shahab-ud-din Ghorî, and the Emperor Ala-ud-din Khiljî destroyed 1000 temples, and built mosques on their sites. From that date Benares was governed by the Moslems. It is due to the iconoclastic spirit of the conquerors that hardly a single building can be found in Benares which dates beyond the time of Akbar (1556-1605 A.D.), and there are but few which in their present form date beyond the time of the Mahratta supremacy in the latter half of the 18th century.

Benares was ceded to the British in 1775. For several years previous to 1780 Chait Singh, the Raja of Benares, had been called upon to provide special financial aid, but had made excuses. Warren Hastings in 1780 called on the Raja to furnish a cavalry contingent. When Chait Singh evaded compliance, Hastings imposed a fine of 50 lakhs, and in August 1781 proceeded in person to enforce it.

The small body of British troops was overcome, and Hastings fled to Chunar. He returned with reinforcements and deposed Chait Singh, who retired to Gwalior. The E.I. Co. assumed the administration; and with the appointment in 1787 of Jonathan Duncan (p. 90) as Resident, a regular settlement of the revenue was taken in hand and completed. The next episode in the history of Benares occurred in 1799, and is associated with the murder of Mr Cherry, the then Resident, by Wazir Ali, the deposed Nawab Wazir of Oudh (p. 90).

In May 1857 the garrison of Benares consisted of the 37th Bengal Infantry, known to be disaffected, and the Ludhiana Sikh regiment. Upon the arrival of Colonel Neill from Calcutta an attempt was made on 4th June to disarm the regiments on parade, but this miscarried, and in the end it became necessary to turn the guns on the Sikhs, who were driven off by the fire of the battery of Captain William Olpherts, subsequently so distinguished in the first relief of Lucknow. This mutiny incident—the disarming of the troops—has been the subject of much controversy.

The ornamental **Brasswork** which is met with all over the world is a *spécialité* of Benares; but the modern work is far less carefully executed than the old, which is now difficult to procure. Small idols and other images in brass and other materials are made in great quantities in the narrow lanes around the Golden Temple. The *Thatheri* or *Pital* (*Brass*) *Bazar*, which is about 1 m. from the Cantonment Rly. station, is well worth a visit. White metal (phûl) is likewise largely used for domestic articles. **Shawls, silks, and embroideries** may also be purchased here. The weaving of brocades (Kamkhwabs, or Kin-cobs) is an old Benares speciality:

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its origin cannot be traced. Silk being considered pure by Hindus for ceremonial purposes, silk cloth would naturally be manufactured to meet the demands of wealthy pilgrims. Mughal Emperors, especially Akbar, encouraged the industry, sending brocades as presents to European monarchs. Later, the industry declined, but has been revived; it has, however, been seriously affected by the denial of Empire preference. Indian taste allows the use of silk brocades for all kinds of wearing apparel, upholstery and furniture. In brocade work *Kalabatun* (gold thread) is as essential as silk in the weaving. The loom employed is somewhat elaborate, and closely approaches the application of machinery: the weaving is complex because very elaborate patterns are often produced. The workmen display considerable skill in the arrangement of forms and colours, producing beautiful and harmonious combinations, with the subdued elegance characteristic of Indian decorative art. There are several firms where Indian silks, brocades and kincobs can be purchased. (See Index.)

As the finest view of Benares is obtained from the river Ganges, the banks of which are bordered by *Ghats*, or flights of stone steps, descending to the water from the most famous buildings in the city, the visitor will do well to spend most of his time in a boat, passing along the whole river frontage, where, in the early morning especially, he will see crowds of the people coming down to bathe and drink the water of the sacred river. Good houseboats are available at reasonable rates for inspecting the river front.

For those who are pressed for time, it will be sufficient to see the Durga (Monkey) Temple, and to proceed thence to the riverside for the Observatory, and the *Ghats* as far as the Panchganga

Ghat, disembarking there to see the Golden Temple. This involves an interesting walk of $\frac{3}{4}$ m. through narrow picturesque streets. The best Guide-book now is *Kashi, or Benares*, by the Rev. E. Greaves (Indian Press, Allahabad), obtainable at hotels and railway book-stalls. The Motor Guide to the U.P. will also be found useful. Mr E. B. Havell's *Benares, the Sacred City* (Blackie, 1905), is well edited and illustrated. Americans and others may be reminded of the amusing chapters 53-56, about Benares, in Mark Twain's *More Tramps Abroad* (Chatto & Windus, 1898).

The river Ganges and the Indian town are nearly 3 m. from the

Cantonment, N. of the railway line, where a detachment of Europeans and a sepoy regiment are stationed. Near the *Hotels* is *St. Mary's Church*, with some old tombs mostly removed from the old city cemetery in Chaitganj. To the N. of these, on the opposite side of the river Barma, which is crossed by a stone bridge, is the **Civil Station** of Sikraul (Secrole); here are the District Courts, the Club, the Imperial Bank of India, and the residences of the principal officials. Just beyond the Civil Courts is a house known as **Hastings House** and now the property of Rai Govind Chandra; a sun-dial of Chunar stone on the edge of the road outside the garden was, according to the inscription upon it, erected by Lieut. James Ewart in 1784, by order of Warren Hastings. Recrossing the bridge and proceeding E. of the Church, the visitor will find the Civil Station, and to the E. the Nandeswar Kothi, the Post Office, the old Mint House, and Queen's College.

The **Nandeswar Kothi**, now belonging to the Maharaja of Benares, where he entertains distinguished visitors—King George

V. as Prince of Wales stayed here in 1906, with the Princess, now Queen Mary—was the house in which Mr Samuel Davis,¹ Judge and Magistrate of Benares, was attacked by the followers of Wazir Ali, the deposed Nawab of Oudh, who had just killed Mr Cherry, the British Resident, in the building now occupied by the Collector's Court, on the 14th of January 1799. Mr Davis sent his wife and two children on to the roof, and, with a running footman's pike, placed himself at the top of the staircase leading to it, where he successfully defended himself until he was rescued by the arrival of a regiment of cavalry from Bitabur, the old Cantonment 10 m. away. A tablet was affixed by Lord Curzon to the wall of the house. Opposite is the **Old Mint House**, which belongs also to the Maharaja: another of Lord Curzon's tablets records that it was built as a Mint in 1820-21 from the designs of James Prinsep, the celebrated antiquarian and decipherer of the Asoka inscriptions, who resided here as Mint Master until the abolition of the Benares Mint in 1830.² It was also used as a place of refuge by the European inhabitants of Benares in June and July 1857. In 1926 the interior was remodelled, and a flight of steps leads up to the banqueting hall and drawing-room, which were then provided for the Maharaja's guests.

The **Queen's College**, which was erected by Major Kittoe, of the Bengal Engineers, in 1847-52, is a handsome building in the perpendicular style. The interesting Buddhist and Hindu remains, once

here, have been transferred to Sarnath (p. 100). To the N. of it, i.e., in the College grounds, on the N. side of the College, is an ancient **monolith**, 31½ ft. high, found near Ghazipur. On the obelisk there is an inscription (which has not been deciphered) and an English record of its removal. To the N.E., adjoining the College grounds, is the **Saraswati Bhawan**, containing a famous collection of Sanskrit MSS. The Sanskrit department of the College is renowned for its **pandits**. A tablet in the S.E. corridor inside the main entrance to the College records the foundation in 1791 of the original Sanskrit College by Jonathan Duncan, who was Resident at Benares from 1787 to 1795 and Governor of Bombay from 1795 until his death there in 1811.

The Grand Trunk Road (from Calcutta) crosses the Ganges on the Dufferin Bridge; but except during the rainy season, the adjoining pontoon bridge is commonly used. From the river-bank the road skirts the N. of the city and the Nandeswar Tank, whence one branch traverses the Cantonment E. of the rly. station. Near this road, and before it turns S.E. towards the Nandeswar Tank, are the **Bakariya Kund** and the **Lat Bhairon**. The **Bakariya Kund**, on the right side of the road going from the Cantonment, was a famous, and still is, a picturesque tank teeming with Muhammadan monuments and mosques converted from other Hindu buildings, and built of pre-Muhammadan materials; close to it is a shrine, known as the **Battis Khamba**, or **Thirty-two Pillars**, now a Muhammadan tomb. The whole neighbourhood of the **Bakariya Kund** is now dirty and neglected, and only of interest to the antiquarian. The **Lat Bhairon** near the E. side of the loop made by the B. and N.W. and E.I. Rly. lines, is now represented by the stump of a

¹ Davis was an accomplished amateur artist, and a collection of his water-colours is on view at the Victoria Memorial Hall, Calcutta (p. 117).

² Visitors should, if possible, procure a sight at some public library of *Benares Illustrated*, a series of beautiful lithographs after drawings by James Prinsep. The book was published at Calcutta in 1831.

massive pillar, painted red, which stands in a small enclosure in an open *idgah* (Muhammadan place of worship). Its present appearance is due to the fact that it was pulled down in 1809 during a serious riot, and was broken to pieces. In origin it is probably a Buddhist relic, and may possibly be one of the Lats erected by King Asoka. The **Ganj-i-shahid Mosque**, not easy to find, behind some broken-down steps, on the S. side of the open space in front of the Kashi Railway Station, is an interesting mosque erected as a memorial of the Mussulmans who fell in the early captures of Benares. It supplies an instance of the conversion of an old temple, supposed to be Buddhist, to the uses of the Muhammadan faith. Near the Kashi stn. also is the **Arhai Kangura Mosque**, which probably dates from the early period of Muhammadan occupation. The pillars have clearly been taken from some older Buddhist or Hindu temple. Its name (*arhai*, two and a half, *Kangura*, dome) is belied by the single dome which is all that it now possesses. There is a Hindu inscription of 1190 A.D.

Returning to the Queen's College as a starting-point, the visitor will observe that the road to the E. turns S. and then divides. One branch, which forms the main carriage approach to the river, passes the municipal offices, the old Chaitganj cemetery and the *Victoria Park* (in which there is a statue of the Queen-Empress), and leads to the Dasaswamedh Ghat (p. 94). The other branch running E. again passes the Zenana Mission, the Ishwari Memorial Hospital (built by the present Maharaja of Benares in memory of his father), and the King Edward VII. General Hospital, and emerges at the Municipal Gardens; here will be found the Town Hall (built by the Maharaja of Vizianagram, a Madras land-

holder, who died here in 1845), the Kotwali, or central police station, which looks like a fort, and the Machodri garden (Gokul Chaud Park). The King Edward VII. Hospital was built by gentry of Benares to commemorate the visit of Edward VII., then Prince of Wales, to the city in 1876. Adjoining the Hospital is the **Garden of Madho Das**, now in the possession of the Radha Swami sect, where Warren Hastings was encamped when he attempted to arrest Raja Chait Singh, of Benares (see p. 88), on 16th August 1781, and it was from here that, five days later, he was obliged to retreat by night to Chunar after the repulse of the first detachment of retiring troops at Ramnagar. They assaulted the town in direct disobedience of Hastings' orders. At a later date (1787-1795) the house was occupied by the Resident, Jonathan Duncan (p. 90), and in 1798 it was assigned as the residence of Wazir Ali (p. 90).

The London Mission is close to the Cantonment Railway Station on the S. side of the line; the Wesleyan Mission is in Cantonments; while the Victoria Hospital of the former and the Church Mission are at Sighra, 1 m. S. of the Cantonment Railway Station.

The **Central Hindu College and School**, in the Kamachcha quarter, is in this direction. It was started in 1899 under the auspices of Mrs Annie Besant, and had for its object the combination of religious and moral education with mental and athletic development for Hindu youths. The College, which was visited by King George V., then Prince of Wales, on 19th February 1906, is now used as a high school. To the S. is the **Vizianagram Palace**, and close to this on the W., are several Jain Temples. This is the reputed birthplace of Parasnath, the famous Jain Saint. Still further S. is the **Benares Hindu University**,

which should be visited. The buildings, which cover an area of 2 sq. m., are some distance from the river-bank, but are almost opposite the Ramnagar Fort on the other side of the Ganges (p. 100). The foundation-stone was laid by Lord Hardinge in 1916, and the University moved into the buildings in 1921. The various Departments form the diameter of a semicircle; behind them are five hostels (which accommodate nearly 2000 students) and extensive playgrounds; the residences for the staff are on the circumference.

THE DURGA, OR "MONKEY" TEMPLE

Most of the principal temples are in the centre of the city and are described later. But, as the visitor makes his way S. to the University buildings, he will pass one shrine which figures prominently in every book on Benares.

The Durga Temple, miscalled the Monkey Temple by Europeans from the numbers of monkeys which inhabit the large trees near it, is about three-fifths of a mile S. of the Vizianagram Palace. It is stained red with ochre, and stands in a quadrangle surrounded by high walls. In front of the principal entrance is the band room, where musicians beat a large drum three times a day. The central portion is supported by twelve curiously-carved pillars on a platform raised 4 ft. from the ground. Through the doors, plated with brass, the image of the goddess may be seen; in the porch are two bells. One of these bells has a curious history. Round the rim is engraved the following inscription in Urdu characters: "Mister Willim Jems Garant sahib Bahadur Kalaktar shahr Banaras mah Asarh Fasli 1215." William James Grant, who was Collector of Benares in

A.D. 1808 (which corresponds with the Fasli year 1215), was out on the river with his wife and children when they were caught in a whirlpool off Garhwa Ghat, which is near the Maharaja's palace at Ramnagar (p. 100). The boatmen invoked the aid of the goddess Durga and brought the boat to shore with the greatest difficulty, whereupon the Collector presented the bell as a thank-offering.¹ The temple and the fine tank adjoining (Durga Kund) were constructed by Rani Bhawani of Nator in Bengal in the 18th century. As Durga is the terrific form of Siva's wife, and is said to delight in destruction, bloody sacrifices of goats are offered to her here.

Next to the temple is the white marble tomb and shrine of Swami Bhaskarananda, which is well worth seeing. Although entirely modern, it is one of the most beautiful buildings in Benares and commemorates an interesting personality.

THE RIVER FRONT

From the Durga Temple, which can be reached from the Asi Ghat by a very narrow road, and is over 1½ m. from the other Ghats, the visitor may proceed to the Ghats, embarking either at the upper end of them from the Asi Ghat, or more conveniently from the central Dasaswamedh or Man Mandir Ghat, and rowing slowly past in front of them. In the following account the Ghats are given in succession from the S., proceeding down stream.

The Asi Ghat is one of the five special places of pilgrimage in

¹ The story has been discredited; and the bell had become so encrusted with vermilion paint and rust that the inscription could not be read. In 1928, however, the bell was cleaned at the request of the Collector, Mr V. N. Mehta, I.C.S., who is a Brahman, and the inscription was deciphered by Mr Jagannath Das Ratnakar.

Benares. These are known as the **Panchtirath**, and the pilgrim should bathe in them successively on the same day; proceeding from Asi to Dasaswamedh and the Barnasangam (beyond the Dufferin Bridge) and then retracing his steps to Panchganga and Manikarnika. The channel of the Asi, which here falls into the Ganges, is dry during the cold weather, but is about 40 ft. broad. The steps at the Ghat are a good deal broken. It is the *nearest* from which to cross from Nagwa Ghat to Ramnagar, the palace of the Maharaja of Benares, but as there is a ferry actually at Ramnagar, which affords an excellent view of the city, with a metalled road running from the city to Ramnagar ferry, there is no particular object in crossing from Asi. The next Ghat is the **Lala Mir Ghat**, which belongs to the Maharaja of Rewah. At the N. end of the **Tulsi Ghat**, which follows, huge masses of masonry have fallen, and lie on the river's edge; this Ghat is named after Gosain Tulsi Das, author of the famous version in Hindi of the *Ramayana*, who died at Benares in 1623. He is said to have lived in the corner building at the N. of the Ghat, while writing the latter part of the epic (which contains 12,800 lines) and also to have composed there the *Rama-dataka*, one of his minor poems, in a single night. His shoes and pillow (takya) and a piece of wood on which he is supposed to have crossed the Ganges, are preserved, but are not, as a rule, shown to visitors. The **Janki Ghat** is quite new; at the top of the steps are four Siva temples with gilded pinnacles, and behind them is the fine Lularik well. At the foot of the Ghat is the pumping station of the Benares Water Works. The **Bachhraj Ghat** belongs to the Jains, who have built three temples on the bank of the river.

Ghat, where the fort in which Chait Singh resided stood. It is a handsome building, and appears as fresh as when first constructed. In the upper part of the N. wall are five small windows in a row, from one of which Chait Singh made his escape when he fled from Warren Hastings in 1781. It is now called the Kali Mahal, after the goddess Kali, and was repurchased by the Maharaja of Benares. In this building two companies of Sepoys and three young officers, who were sent by Hastings to arrest Chait Singh, were massacred by a mob which discovered that the soldiers had come without ammunition. When fresh troops reached the palace Chait Singh had fled. The graves of the three officers, distinguished by a memorial tablet, lie in a narrow street, a short distance to the back of the palace. There is a memorial in the Cantonment churchyard. (The walled enclosure in which the sepoys were interred is close to the Chaitganj police station, on the road from Queen's College to Dasaswamedh Ghat.) The Sivala Ghat is one of the finest of all the Ghats. Part of it is assigned to the religious ascetics called Gusains. The next is the **Dandi Ghat**, and is devoted to the staff-bearing ascetics called Dandi Panths. It is also very fine. The **Hanuman Ghat**, which follows, is large and generally crowded; at the head of it is a temple of the Monkey God. At the **Smashan** (or **Masan**) Ghat which is used as a subsidiary cremation ground, wooden pyres may be seen being built, while bodies wrapped up in white or red cloths lie with their feet in the Ganges ready to be burned. The Ghat is also known by the name of **Raja Harish Chandra**, a favourite hero of Hindu drama, who gave up his kingdom, and selling his wife and child into slavery, became the slave himself for a year of the *chandal*, or out-

Next comes the Sivala (Shiwala)

caste, whose duty it was to attend to the burnings at this very Ghat.

Passing the Lali Ghat, the **Kedar Ghat**, which comes next, deserves attention as one of the finest and loftiest of all. The Kedar temple just above Kedar Ghat is the popular shrine of the Bengalis, who inhabit this quarter of the city and also of the Tilanga pilgrims (from S. India). Kedar is a name of Siva, but it also signifies a mountain, and especially a part of the Himalayan mountains, of which Siva is the lord, hence called Kedarnath. His temple, at the head of the steps, is a spacious building, the centre of which is supposed to be the place where Kedarnath dwells; the interior can be seen from the doorway. At the four corners are Sivalas, with cupolas. There are two brass figures, hidden by a cloth, which is removed on payment of a fee. The walls and pillars are painted red or white. There are also two large black figures, which represent *dwarvals*, or janitors; each has four hands holding a trident, a flower, a club, and the fourth empty to push away intruders. Half-way down the Ghat is a pool cut in the steps called the Gauri Kund, or "well of Gauri," Siva's wife, the waters of which are considered efficacious in curing fevers, dysentery, etc.; on the steps of the Ghat are many lingam emblems of Siva. The Mansarowar Ghat (built by Raja Man Singh) leads to the **Mansarowar** tank, round which are sixty shrines, now very dilapidated. Mansarowar is a lake in Tibetan territory, just across the borders of British India, at the foot of the Kailash mountain, where the god Siva is believed to have had his abode. Near the tank at Benares so-called is a stone $4\frac{1}{2}$ ft. high and $15\frac{1}{2}$ ft. in periphery, which is said to grow daily to the extent of a sesame seed. In a street to the E. of the tank are figures of

Balkrishna, or the infant **Krishna**, and Chatarbhuj or Vishnu. At the **Chauki Ghat**, under a pipal tree, are many idols and figures of snakes. In a street close by, called Kewal, is a figure of Durga with ten arms. Continuing down stream, the **Someswar Ghat** is reached; so called from the adjacent temple of the moon, *Soma* being the "moon," and *Iswar* "lord." At this Ghat every kind of disease is supposed to be healed. Close by is an alley, in which is the shrine of Barahin Devi, a female Æsculapius, who is worshipped in the morning, and is supposed to cure swollen hands and feet. The head of the **Narad Ghat**, named after the famous Rishi, winds up picturesquely under two fine pipal trees.

The next Ghat, where the stairs ascend into a large house, or *sarai*, built by Amrit Rao for Brahmans, is the **Raja Ghat**. The **Chausathi Ghat** is one of the most ancient at Benares. The **Rana Ghat**, next to it, built by the Maharana of Udaipur, is not much frequented. The **Munshi Ghat** is the most picturesque of all the Ghats at Benares. It was built by Munshi Shri Dhar, Diwan of the Raja of Nagpur, and now belongs to the Maharaja of Darbhanga (p. 473). **Ahalya Bai's** Ghat between this and the Dasaswamedh Ghat was built by the famous Mahratta Princess who governed Indore from 1765 to 1795 (p. 148). Both the ghat and the building which surmounts it are fine.

The **Dasaswamedh Ghat** is one of the five celebrated places of pilgrimage in Benares, the other four being the junctions (*sangam*) of the Asi and Barna with the Ganges, and the Manikarnika and Panchganga Ghats. It is specially thronged during eclipses. Here Brahma is said to have offered in sacrifice (*medh*) ten (*das*) horses (*aswa*), and to have made

the place equal in merit to Allahabad. The road to this Ghat from the W. was formerly the only approach to the river between the two extreme ends of the town, until the Municipality opened up another but much less important road at the Masan (Smashan) Ghat (see above), called the Harish Chandra Road.

At the S. end of the Ghat, which should be visited on foot, is a low whitewashed shrine of Sitala, the goddess of smallpox, and of the presiding deity of the Ghat, figured under a brass lingam. Farther on at the Ghat are life-size stone figures in niches of the Ganges, Saraswati, and Jumna rivers, and of Vishnu, the Trimurti or Trinity, and the Narsingh or lion-man incarnation of Vishnu, which are passed on the way to the **Man Mandir Ghat** and the **Observatory**, much admired by some experts: Mr Havell, however, says that the greater part was restored at the end of the 19th century, with inferior brick and plaster.¹ One portion of the original work remains. High up, on the extreme N.E. corner, is an exquisite stone balcony which is one of the gems of Benares. A good view can be had from the river, but a better one from the Ghat, standing N.E. of it. This lofty building gives a fine appearance to the Ghat, and commands a beautiful view of the river. It was erected by Raja Man Singh of Amber (p. 224) about the year 1600, and the Observatory at the top was added by Raja Sawai Jai Singh, the founder of Jaipur, who founded four other Observatories—at Delhi, Muttra, Ujjain, and Jaipur. On entering the Observatory, the first instrument seen is the **Bhittiyatra**, or "mural quadrant." It is a wall 11 ft. high and 9 ft. 1½ in.

broad, in the plane of the meridian; by this are ascertained the sun's altitude and zenith distance, and its greatest declination, and hence the latitude. Then come two large circles, one of stone and the other of cement, and a stone square, used, perhaps, for ascertaining the shadow of the gnomon and the degrees of azimuth. The **Samratyantra** seen next is a wall which is 36 ft. long and 4½ ft. broad, and is set in the plane of the meridian. One end is 6 ft. 4½ in. high, and the other 22 ft. 3½ in., and it slopes gradually up so as to point to the North Pole. By this, the distance from the meridian, the declination of any planet or star and of the sun, and the right ascension of a star, are calculated. There are also a double mural quadrant, an equinoctial circle of stone, and another **Samratyantra**. Close by is the **Chakrayantra**, between two walls, used for finding the declination of a planet or star; and near it a **Digamsayantra**, to find the degrees of azimuth of a planet or star. The instruments are fully described in a leaflet obtainable at the Observatory.¹

The **Mir Ghat** (used by Muhammadans) leads up to the Dharm Kup, or Sacred Well, and the Lalita Ghat to the **Nepalese Temple**, a picturesque object, but disfigured by indecent carvings; they do not catch the eye, and if the attendant can be discouraged from pointing them out, nobody need keep away on their account. This does not resemble in the least the Hindu temples and is remarkable for a double roof such as those which are placed on Chinese temples to break the fall of snow.

The famous **Golden Temple** (some way from the river, see p. 47) is between this Ghat and the **Jalsain Ghat**, or **Burning Ghat**,

¹ See also *A Guide to the Old Observatories at Delhi, Jaipur, Ujjain and Benares*, by G. R. Kaye (Calcutta, 1920).

¹ An oil painting by Thomas Daniell, in the rooms of the Asiatic Society of Bengal at Calcutta (p. 115) shows the original river front.

which lies beyond the Nepalese Temple on the down-stream side, and is crowned by a mass of temples and spires. Numbers of cremations are usually in progress on the spot, and many sati stones will be noticed all round it; it is naturally regarded by the Hindus as one of the most holy places in the whole of Benares. The name is derived from Vishnu in his manifestation of Jalsai, "the sleeper on the ocean."

The **Manikarnika Ghat** is considered the most sacred of all the Ghats, and in November is visited by multitudes of pilgrims. Just above the flight of steps, which are enclosed by piers running out into the river, is the Manikarnika Well, or pool, and between it and the steps is the temple of Tarkeswar. The well has its name from *Mani*, "a jewel," and *Karna*, "the ear." Parvati, the wife of Mahadeo, is said to have dropped her earring, and Mahadeo in searching for it, dug a large hole with his discus. This became the tank, and the God's sweat filled it with water. During an eclipse of the sun it is visited by great numbers of pilgrims. The well, or, more properly, tank, is 35 ft. square, and stone steps lead down to the water. Offerings of the Bel tree, flowers, milk, sandalwood, sweetmeats, and water are thrown into it, and the smell arising from it is in consequence anything but pleasant. Between the well and the Ghat is the Charanpaduka, a round slab projecting slightly from the pavement, on which stands a pedestal of stone; on its marble top are two imprints, said to have been made by the feet of Vishnu. The privilege of being burnt at the Charanpaduka, instead of the usual burning Ghat, is confined to a few families, and is much prized. At the second flight of steps of this Ghat is a temple to Siddha Vinayak, or Ganesh. The idol has three eyes, is painted red,

and has a silver scalp and an elephant's trunk covered with a bib. At the feet of the image is the figure of a rat, which is the vahana, or "vehicle," of Ganesh. Overhanging the Ghat is the red-domed temple of the Raja of Amethi (an Oudh landowner), which is one of the best from an artistic point of view.

Next to this Ghat is the **Dattatreya Ghat**, called after the great Brahman saint and teacher of that name, in whom parts of the three great Hindu deities, Brahma, Vishnu, and Siva, were said to have been incarnated. His *paduka*, or footprint, is shown in a small temple on the Ghat.

Scindia's Ghat was intended to have been one of the grandest of the whole front, but, owing to the great weight of the superstructures, the foundations have sunk several feet, and are still gradually sinking. It has been in this state for nearly a century. The temple on the left of the S. turret is rent from top to bottom, as are the stairs leading to the curtain between the turrets. It was built about 1830 A.D. by Baiza Bai, widow of Daulat Rao Scindia, who constructed the colonnade round the Gyan Kup (see p. 98). Passing two Ghats, the next reached is the **Bhosla**, miscalled the Ghosla, Ghat which was built by the **Nagpur Raja** one hundred years ago, and is very massive and handsome. The following picturesque Ghat was built by the last of the Peshwas. The **Ram Ghat**, which comes next, was built by the Raja of Jaipur.

The next large Ghat is the **Panohganga Ghat**, beneath which five rivers are supposed to meet; it was built by Raja Man Singh, and carries a number of picturesque shrines. Above it rises the smaller mosque of Aurangzeb, called in old maps the "Minarets."

These were taken down and restored under the direction of James Prinsep (p. 90) as the foundations were giving way. They have been deservedly admired for their simplicity and boldness of execution. The mosque itself possesses no particular claim to architectural beauty. It occupies the site of a temple to Vishnu under the name of Madho, which is described by Tavernier, and this seems to be a more probable reason for the local name (Madho Rai ki Masjid) than the derivation from a Hindu architect, Madho Das, who is supposed to have built it for the Emperor. The view from the top of the minarets, which rise nearly 150 ft. above the platform of the mosque, is extremely fine. If the full climb is too much, it is quite worth while to ascend to the roof of the building. The two *stupas* at Sarnath can be seen from here, and the Mirzapur Hills. From the river the view is equally good.

Four unimportant Ghats lie between this and the second Sitala or Raj Mandil Ghat, below which is the **Gai Ghat**, so called from the number of cows that resort to it, and also from the stone figure of a cow there, stands out into the river. There are no steps, and cows can reach the river without mishap. This is the real reason for the name.

The **Trilochan Ghat**, the next reached, has two turrets in the river, and the water between them possesses a special sanctity. The pilgrims bathe in the Ganges at this Ghat, and then proceed to the Panchganga and there bathe again. At the head of the Ghat is a temple of Trilochan, or the Three-Eyed, another form of Siva. The **Prahlad Ghat** is the last masonry Ghat of all, and from it a fine view is obtained of the whole river front. Farther down the stream is the site of the old

Raj Ghat ferry, now spanned by the great Dufferin Bridge; also by a pontoon bridge, except in the rains, just above the Dufferin Bridge. These bridges are near the **Raj Ghat**: the *Barna Sangam*, or junction of the Ganges and Barna, is $\frac{1}{2}$ m. lower down. The **Dufferin Bridge**, which was completed in 1887, is nearly $\frac{1}{2}$ m. in length and enables not only the railway but the Grand Trunk Road to cross the river. Raj Ghat Fort dates from antiquity: newly reoccupied and reconstructed during the Mutiny, it is now dismantled. The clusters of temples at the junction are very picturesque here in the ruins. Within the area of the Fort and in the S. corner of the plateau is the **Tomb of Lal Khan**, a minister of a former Raja of Benares, with coloured tiles and mosaics, described by Mr Havell as one of the few original Muhammadan buildings in Benares with pretensions to architectural beauty. To the N.W. is the **Palang Shahid**, a small Muhammadan cemetery.

TEMPLES AND MOSQUES

The **Golden Temple** is dedicated to Biseswar (Sanskrit Visvesvara), or Siva, as the Lord of the Universe. It is reached by leaving the Chauk (the centre of the city close to the Town Hall, on the road to Dasaswamedh Ghat) by a gateway on the E. and turning sharply to the right into Kachouri Gali, a typical Benares lane, full of shops. The temple, which is surrounded by very narrow, crowded streets, is in a roofed quadrangle, above which rises the tower. At each corner is a dome, and at the S.E. a Sivala. Opposite the entrance, with its finely-wrought brass doors, is a shop where flowers are sold for offerings. The upper rooms are used as the temple office; they are on a level with the three

towers of the temple, and from them the interior may be seen. The red conical¹ tower (left) is that of Mahadeo's temple; next to it is a gilt dome, and on the right is the gilt tower of Biseswar's temple. The three are in a row in the centre of the quadrangle, which they almost fill up. Two of them are covered with gold plates, over plates of copper which cover the stones. The expense of gilding was defrayed by Maharaja Ranjit Singh, of Lahore. The temple of Biseswar is 51 ft. high. Between it and the temple of Mahadeo hang nine bells from a carved stone framework. One of these, and the most elegant, was presented by the Maharaja of Nepal. The temple of Mahadeo was built by Ahalya Bai, Princess of Indore (p. 148). Outside the enclosure is the Court of Mahadeo, where on a platform are a number of lingams, and many small idols are built into the wall. They are thought to have belonged to the old temple of Biseswar, which stood N.W. of the present one, and of which the remains are still to be seen, forming part of the mosque which Aurangzeb built on them.

In the quadrangle between the mosque and the Temple of Biseswar is the famous **Gyan Kup**, or **Gyan Bapi**, "Well of Knowledge," where, according to Hindu tradition, the emblem of Siva took refuge when the original temple was destroyed, and still is. The well is protected by a high stone screen, and covered by a stone canopy, and the worshippers, an eager and excited crowd, by whom the quadrangle is always thronged, are no longer permitted to cast offerings of flowers, etc., into it. A draught of its sacred water is held to induce the highest spiritual illumination. The roof and colon-

nade of the quadrangle were built by Baiza Bai, widow of Daulat Rao Scindia. On one side of the colonnade is a stone bull, or Nandi, given by the Raja of Nepal, 7 ft. high. On another side is an iron railing, within which is a shrine of white marble and one of white stone, and a carved stone support, from which hangs a bell. Around are many richly-carved small temples, particularly one to the S. of Biseswar; the gateways of the courtyard are similarly carved, and small gilded spires add to the picturesqueness of the scene.

The great **Muhammadian Mosque** lies to the N.W. side of the Gyan Kup. The two octagonal minarets are 232 ft. above the Ganges. The Hindus claim the courtyard between it and the temple wall, and in consequence, it is entered from the side. The bigoted Emperor Aurangzeb (1658-1707) is credited with the destruction of the most ancient and sacred Siva temple at Benares and the erection of the mosque on its site. During the period of three and a half centuries since the mosque was built not a stone has been loosened. A goodly number of the faithful assemble here on Fridays; at other times it is less frequented. The beautiful columns in the front of the mosque belonged to the destroyed temple, of which further fine remains may be seen at the back of the mosque.

Just outside the Golden Temple is the **Shrine of Sanichar**, or **Sani**, the planet Saturn or its regent. The image is a round silver disc, from which hangs an apron, or cloth, which prevents one remarking that it is a head without a body. A garland hangs from either ear, and a canopy is spread above. A few steps beyond this is the **Temple of Annapurna**, a goddess whose name is compounded of **Anna**, "food," and **Purna**, "who is filled." She is supposed to have express orders

¹ These conical towers, almost universal in Hindu temples, are called *Sikhars*. The origin of their peculiar form is unknown. See Fergusson's *Indian Architecture*, 1, 322.

from Biseswar to feed the inhabitants of Benares, and in front of this temple are always a number of beggars who are chiefly women. It was built about 1725 by the Peshwa of that date, Baji Rao I. There are four shrines in this temple dedicated to the Sun, Ganesh, Gaurisankar, and the monkey-god Hanuman. Near it again is the temple of **Sakhi Vinayak**, the witnessing deity. It was built in 1770 by a Mahratta, whose name is not recorded. Here pilgrims, after finishing the Panch Kosi circuit round Benares, get a certificate of having done so. S. of the temple to Sani is that of **Shukareswar** (*Shukar* being the planet Venus), where prayers are made for handsome sons. Between the Temple of Annapurna, and that of Sakhi Vinayak is a strange Figure of **Ganesh**, squatting on a platform raised a little above the path. This ugly object is red, with silver hands, feet, ears, and elephant's trunk.

The narrow streets and lanes which connect the Ghats with one another, and the parts of the city lying more remote from the river front, will be found exceedingly interesting; but they cannot be described as clean and sweet, and they must be traversed on foot, though a carriage proceeding along the broader streets at the back can be rejoined at intervals. This mass of narrow streets, too narrow for wheeled traffic, and overhung by lofty houses, is known as the "Pukka Mahals" and is one of the most characteristic features of Benares. It comprises the whole of the city nearest the river, but is of varying depth and covers altogether several square miles. Almost every corner of the Pukka Mahals is picturesque. The effect of the closely crowded houses can be seen from the minarets of the *smaller mosque* of Aurangzeb above the Panchganga Ghat,

1 m. to the W. of the Golden Temple is the **Temple of Bhaironath**, which is situated in a lane at some little distance from the back of the Telegraph Office. It was built by the ex-Peshwa Baji Rao II. in 1825, and is remarkable for a fine tamarind tree. The image in the temple is considered to be the Kotwal, or magistrate of the city, who rides about on an invisible dog. There is an image of a dog close to the idol, and the confectioners near sell images of dogs, made of sugar, which are offered to it. A Brahman waves a fan of peacock's feathers over visitors to protect them from evil spirits, and they in return must drop offerings into the cocoanut shell he holds. The idol is of stone, with a face of silver and four hands. The Dandpan temple close to this contains the staff of Bhairon, a stone shaft 4½ ft. high, and the famous Kal Kup, or Well of Fate, into which the sunlight falls from a hole in the wall above.

The **Gopal Mandir** lies off a narrow lane behind the Kotwali and close to the Dandpan and Kal Kup. In the garden of the temple is a small house or hut in which Tulsi Das (p. 93) is said to have composed his *Binaya Patrika*, a poem which such authorities as Sir George Grierson pronounce to be superior to the *Ramayana*. A tablet was affixed to the wall by Lord Curzon. The Kameswar temple of the God of Love, lies to the N.W. of Bhaironath and near the Machodri garden (Gokul Chand Park). It is of the 12th century and quite interesting.

The dingy **Bridhkal** temple, which lies N.E. from the Municipal Garden, is one of the oldest in the city, and originally had twelve courts, of which seven remain. It contains a well and a small tank renowned for the healing of diseases. The name *Bridhkal*

means "the fate of old age"; and the temple is said to have been built by an aged and infirm Raja whom Mahadeva restored to youth and health. **Alamgir's Mosque** is situated in a back alley about 100 yds. to the S. The pillars are ancient and are supposed to be Buddhist.

S. of the London Mission is the **Pisach Mochan Tank**, which is also connected with Bhairon. On the platform of one of the surrounding temples is the head of the *pisach* (goblin or demon) from whom Bhairon delivered the city (*mochan*, deliverance). There is an illustration of this strange object in Mr Greaves' *Guide*.

The palace and fort of the Maharaja of Benares at **Ramnagar**, on the right bank of the Ganges, may be visited by permission, to be obtained from the Secretary to His Highness. It stands above a fine Ghat, and affords a splendid view of the river front of Benares. The Maharaja Lt.-Col. H.H. Sir Prabhu Narayan Singh, G.C.S.I., G.C.I.E., who belongs to the family of Raja Chait Singh, was born in 1855 and succeeded in 1889; in 1911, he was granted the powers of a Ruling Chief in his domains. These extend over an area of 875 sq. m., with a pop. of 362,735 and an annual revenue of 22 lakhs, which includes a large income from extensive *Zamindari* in British territory.

SARNATH.

Sarnath,¹ the site where Buddha preached his first sermon, is some 4 m. N. of Benares, not far from the high road to Ghazipur, which is left at the third milestone. Shortly

after turning to the left two towers are seen—the Chaukhandi, on a hill; the other the Dhamekh¹ *stupa* (Fergusson's *Ind. Arch.* 1, 73). The road journey is an easy drive and the road is metalled all the way: it would be a waste of time to go by train, but Sarnath can also be reached by the B. & N.W. line from Benares Cant. stn. to Mau junction and Bhatni.

According to the earliest information, Sarnath was known as the "Deer Park," and is prominent in one of the Jataka, or Birth-stories of the Buddha. In his lifetime his five early attendants retired there for meditation after forsaking their master; there Buddha first made known his doctrines to the world. Buddhists have always revered the spot where he sat and preached as holy ground. The Chinese travellers—Fa-Hian, at the beginning of the 5th century; Hiuen Tsang, between 629 and 645 A.D.—visited the site. The former mentioned two monasteries as existing in the Deer Park, and four memorial topes, which he saw. The latter, Hiuen Tsang, described more fully the whole *sangharama* (monastery) as he saw it. He mentioned 1500 priests in the convent, a *vihara* 200 ft. high, a figure of Buddha represented as "turning the wheel of the Law"—i.e., preaching—Asoka's stone *stupa*, a stone pillar 70 ft. high, three lakes, other monuments, and the most magnificent *stupa* of all, 300 ft. high. Sarnath was probably destroyed when Kutb-ud-din, Shahab-ud-din Ghori's General, devastated Benares in 1194 A.D. It is certain that after the overthrow of Buddhism in India Sarnath was completely deserted.

The *stupa* locally known as the Dhamekh Tower (a little to N.E. of a modern Jain temple) consists "of a stone basement 93 ft. in diameter and solidly built, the stones being clamped together with iron,

¹ See the *Guide to the Buddhist Ruins of Sarnath*, by Dayaram Sahni, M.A., Superintendent, Hindu and Buddhist Monuments, Northern Circle. Calcutta, 1917.

¹ Dhamekh is a corruption of Dharmeksha, the pondering of the Law.

to the height of 43 ft. Above that it is in brickwork, rising to a height of 104 ft. above the terrace of the temple, and 143 ft., including its foundations. Externally the lower part is relieved by eight projecting faces, each 21 ft. 6 in. wide and 15 ft. apart. In each is a small niche, intended, apparently, to contain an image, and below them, encircling the monument, is a band of sculptured ornament of the most exquisite beauty. The central part of this band consists of geometric patterns of great intricacy, but combined with singular skill, while above and below are rich floral arabesques, the whole being peculiarly characteristic of the art of the Imperial Guptas. The carvings round the niches and in the projections have been left unfinished, and judging by the absence of any fragments either in stone or brick or plaster around the *stupa*, it seems not improbable that the upper part of the tower was never completed."¹

In his examination of the Dhamekh Tower General Sir A. Cunningham found, buried in the brickwork, an inscribed stone with the Buddhist formula "Ye dhamma hetuprabhava," etc., said to be in characters of the 7th century, a record held by the latest opinion to be contemporary with the last rebuilding of the *stupa* (Fergusson, *Ind. Arch.*, I, 72-75, ascribed the erection of this Sarnath monument to the 11th century). It is believed that the lowest stratum of brickwork represents the first *stupa* on this spot, which was afterwards built over and enlarged to the dimensions as they now appear.

Some 500 ft. to the W. of the Dhamekh Tower there was another, called the Jagat Singh *stupa* (from the name of a Diwan of the Raja Chait Singh, of Benares, who had it dug for bricks), now a mere shell,

¹ Memorandum by the Director-General of Archaeology in India.

all the core having been removed; the innermost existing ring has a diameter of over 44 ft. On the discovery of this *stupa* in 1794 and the valuables found therein, Sarnath became a favourite hunting-ground for treasure-seekers, and cartloads of images and terracottas are said to have been carried away. The sculptures and carvings found have been distributed between the Indian Museum, Calcutta, and the handsome Museum at Sarnath itself, erected in a style in keeping with the associations of the place. Numerous finds, made before and since 1905, are arranged in it, and there is a good catalogue with a useful introduction.¹ Since 1905 the Archaeological Department have undertaken the thorough exploration of the whole Sarnath site, and have done a good deal of work here.

A conspicuous structure is to be seen some 20 yds. due N. of the Jagat Singh *stupa*, named the "Main Shrine," which both "served as a shrine and formed the centre of numerous smaller memorials built round it. It is a rectangular building measuring 95 ft. by 90 ft., with doubly-recessed corners, and still standing to a height of some 18 ft. It is built partly of stone, partly of brick, and much of the former material, at any rate, has been taken from earlier structures, notably of the Gupta period. From the thickness of the original walls and the additions subsequently made to them in the interior of the building, it is evident that they were intended to support a massive and probably lofty superstructure, but what design this superstructure had there is at present no means of ascertaining." A small *stupa* in the S. chapel of the Main Shrine

¹ See *Catalogue of the Museum of Archaeology, Sarnath*, by Daya Ram Sahni, M.A., Assistant Superintendent, Archaeological Survey, Calcutta, 1914; Rs. 3/12; obtainable from the Custodian of the Museum.

is surrounded by a stone railing, one of the most interesting and valuable treasures discovered at Sarnath, cut entire from one single block of stone, and the chiselling and polishing of the stone have been executed with a skill which it would be impossible to surpass. Two inscriptions noticed on it are not earlier than the 3rd or 4th century A.D., but its workmanship connects it with the epoch of the Emperor Asoka (274-237 B.C.). The Main Shrine belongs approximately to the 11th century A.D. Round the Main Shrine was a concrete pavement, 40 ft. square, covered with numerous chapels, *stupas*, and monuments of brick, plaster, and stone, ranging from the Kushana period (45-225 A.D.) to the 11th or 12th century.

To the W. of the Main Shrine is the broken shaft of the Asoka sandstone column. There is only a stump *in situ* now: the capital is in the Museum, where it has the place of honour. The portion still standing measures 16 ft. 8 in. in height, with a diameter of 2 ft 6 in. at the bottom. The upper part of the shaft, with the capital lay broken against the side of the shrine. The whole height, including the capital, appears to have been about 50 ft. The capital, "which measures 7 ft. high, is of the Persepolitan bell-shaped type, surmounted by four magnificent lions sitting back to back with a wheel between them—symbolising the law of the Buddha, which was first promulgated at Sarnath. Beneath the lions is a drum ornamented with four animals in relief—viz., a lion, an elephant, a bull, and a horse—separated from each other by four wheels. The four crowning lions and the reliefs below are wonderfully vigorous and true to nature, and are treated with that simplicity and reserve which is the keynote of all great masterpieces of plastic art. India certainly has produced no other sculpture to equal them. That

the column was set up by the Emperor Asoka is evident not only from its character and style, but from the presence of an edict of that Emperor on the portion still *in situ*. This edict enjoins that whatsoever monk or nun creates schisms in the *sangha* should be made to put on white clothes and reside outside the convent. His Sacred Majesty further urges that his order should also be made known to the lay-members. The superintendents of the sacred law should also familiarise themselves with the edict, and make it known in their own circles and elsewhere."

Most of the area excavated under the pavement is occupied by a large rectangular chamber or court measuring 48 ft. by 28 ft., with a variety of other structures adjoining it. This chamber was surrounded on three sides by a railing of Mauryan date (321-184 B.C.), built into the brickwork of the walls. Much of this railing has, unfortunately, perished, but the position of all the columns and cross-bars is clearly marked by indentations in the brickwork. The excavations have been extended some distance on every side of the Main Shrine, disclosing numerous small chapels and *stupas*, separate and in groups, some in perfect preservation, and yielding numbers of sculptures from the relic chambers. The Northern—called the Monastery—Area has already revealed parts of four monasteries, three being of the 3rd, the largest of the 11th or 12th century A.D.

Much of the débris has been cleared from a large *stupa* about half a mile to the S. of the Dhamekh Tower. The mound in which this *stupa* lay buried is known locally as the Chaukhandi or "square" mound, and on its summit is an octagonal brick tower, erected by the Emperor Akbar in 1588 A.D. to commemorate a visit of his father, Humayun, to the spot. An inscription in

Arabic characters on a stone slab above the doorway contains the following record: "As Humayun, king of the Seven Climes, now residing in paradise, deigned to come and sit here one day, thereby increasing the splendour of the sun, so Akbar, his son and humble servant, resolved to build on this spot a lofty tower reaching to the blue sky. It was in the year 996 A.H. that this beautiful building was erected." It is believed that the whole *sangharama* at Sarnath, as elsewhere, was surrounded by a massive circuit wall, 9 ft. thick and of very solid construction, which it is intended to follow up along its whole extent.

The sculptures brought to light at Sarnath "divide themselves naturally into four groups — the first comprising those of the Mauryan epoch, the second those of the Kushana epoch, the third belonging to the age of the Imperial Guptas, and the fourth including all later examples. The chief examples of Mauryan work are the Asoka column and capital, the railing in the Main Shrine, portions of another railing, and two separate capitals. The Kushana group is represented mainly by two colossal pieces of carving, one a Bodhisattwa statue standing 9½ ft. high, the other a gigantic umbrella measuring 10 ft. across, and adorned on its under surface with designs of animals, religious symbols, and geometric patterns." These carvings are now in the Museum. One fact, now made abundantly clear, is that the most important building age at Sarnath was the age of the Imperial Guptas (320-455 A.D.); yet more—they established the existence of an important and wide-reaching school of sculpture at that epoch, and open up for us an almost new chapter in the history of Indian Art. The Gupta origin of the famous Dhamek *stupa* is now no longer doubted; its decoration is reproduced in one or other of the Gupta

sculptures recently unearthed. "This Gupta style exhibits many semi-classical affinities, due to the influence exerted on it by Mauryan, and still more by Gandhara Art. Its pervading spirit, however, and the decorative 'motifs' which peculiarly distinguish it, are essentially and indisputably Indian. Of these motifs the most characteristic are floral arabesques treated with superb grace and boldness, and often enriched by the addition of human figures clinging in supple attitudes among the foliage. Geometric designs, too, of an intricate but never bewildering nature, play an important rôle in the schemes of decoration; while motifs borrowed from jewellery are perhaps more conspicuous in this than in any other school of Indian Art. No less characteristic is the treatment of human figures, which are free from the exaggerated development that repels us from most Indian Sculpture, and which at the same time possess other distinguishing traits that make them easily recognisable."

Among the Gupta sculptures are two bas-reliefs of special interest—one in eight panels, referring to the eight chief places of Buddha's life, while the other depicts events thereof. There are various inscriptions, also, of importance on statues, images, and seals, which help to fix dates and the name of the monastery where Buddha's first sermon was delivered — namely, *Dharmachakrapravartana vihara*, or, short, *Dharmachakra*. The difficulty is to identify the buildings as they now are with those mentioned by the Chinese travellers. Two of the buildings, the Monastery No. 1, and the Main Shrine, are later than the date of Hiuen Tsang.

ROUTE 6.—CALCUTTA CITY AND ENVIRONS

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History.—The capital of the Bengal Presidency¹ is of more recent birth than the capitals of the two sister Presidencies. It dates from 1690, when Hooghly, at which a factory had been established forty-eight years previously, was abandoned in favour of the present site, on which the three villages of Sutanati, Kalikata, and Gobindpur then stood, Job Charnock being the leader of the merchants who settled here. There exists at the India Office a series of eleven volumes of "Bengal Consultations," extending from July 1690 to 1706; in the first of these may be read, in the words of Charnock himself, how the English occupied the deserted village of Sutanati for the third and final time. Permission to rent the three villages was given in 1698 by the Governor of Bengal, Prince Azam, son of the Emperor Aurangzeb. Until December 1699, Bengal was subordinate to Fort St George (Madras), and the first Governor of the new Presidency was Sir Charles Eyre, Charnock's son-in-law. The settlement remained unfortified until 1656, when Sir John Goldsborough laid out the lines of a fort (on the W. side of what is now Dalhousie Square), to which the name of Fort William was given in honour of the reigning King. Thereafter Calcutta continued to flourish, owing to its favourable position at the gate of the principal waterways of N. India, until 1756, when, the fort not being defensible, it was attacked and taken by the Nawab of Murshidabad, Suraj-ud-daula, in return

for the burning of Hooghly by British vessels. Most of the British, including the Governor, fled down the river in ships to Falta; those who remained and attempted a defence became the victims of the historical tragedy of the Black Hole on 20th to 21st June (see p. 123). Late in December Colonel Clive arrived with troops from Madras and with ships under Admiral Watson. Calcutta was retaken by them on 2nd January 1757; the Nawab's position was attacked on 4th February, and his forces were withdrawn from near the town. After some negotiations an agreement was entered into by which the Nawab promised to restore the trading privileges of the Company and return the property plundered in Calcutta. Shortly afterwards a conflict ensued between the French and British, which ended in the capture of Chandernagore by the latter on 23rd March. Encouraged by the French in his service and by proffers of support from the Mahratta Chief of Nagpur, Suraj-ud-daula ultimately refused to accept an exclusive alliance with the British, and this led in due course to the Battle of Plassey, on 23rd June 1757, and Suraj-ud-daula's death. Mir Jafir, the next Nawab, gave the English the zemindari of the 24 Parganas, as well as a free gift of the town and some of the adjacent villages. Heavy compensation was paid to the merchants and the Company's servants for their losses, and permission was granted to establish a mint. From this date the town enjoyed uninterrupted prosperity. With part of the compensation money received from the Nawab, Gobindpur was cleared of its inhabitants and the foundations of the present Fort William were laid in 1758, upon lines traced by Clive. The building was completed about 1773 at a cost of two millions sterling, half a million of which was spent to protect the west face from

¹ Busteed's *Echoes from Old Calcutta* (Thacker, Calcutta, 3rd edn., 1897) contains much information about the place at the end of the 18th century. Another excellent book on the same period is the *Memoirs* of William Hickey (Hurst & Blackett). Blechynden's *Calcutta, Past and Present* (Thacker, 1905), Firminger's *Guide to Calcutta* (Thacker), and Cotton's *Calcutta, Old and New* (specially recommended; Newman, Calcutta), are also full of interest. See also *Calcutta and Environs*, Dr Hassan Suhrawardy (Calcutta, 1924).

the erosion of the river. The clearing of the jungle round the fort led to the formation of the *Maidan*, and the European quarter, which was located between Canning Street and Hastings Street, began to extend southwards along Chowringhi. In 1774 Warren Hastings, who had become Governor of Bengal two years previously, was made the first Governor-General of Bengal, with authority over Bombay and Madras, and the Supreme Court of Judicature was established. The old Cathedral of St John was built between 1783 and 1787, and the Bishopric of Calcutta was created in 1813, the first Bishop being Thomas Middleton, and the second (1823), Reginald Heber. Other distinguished occupants of the See have been Daniel Wilson (1833-1858), who built the modern Cathedral, Cotton, (1858-1866) founder of the schools at Simla and Bangalore, and Milman (1867-1876). The "great apartments" of the present magnificent Government House were opened on the 4th May 1802, "being the anniversary of the fall of Seringapatam;" the Town Hall was completed in 1813, and the Mint between 1824 and 1830, while the Botanical Gardens at Sibpur, on the right bank of the Hooghly, were laid out as early as 1786. It will thus be seen that some of the finest buildings in Calcutta are of much earlier date than those of Bombay and Madras.

In 1854 Calcutta passed with the rest of Bengal under the direct control of a Lieutenant-Governor, a form of government which continued until 1911, when Bengal was restored to her former rank as a Presidency. In 1857 the University was established. In 1862 the Legislative Council of the Lieutenant-Governor was created, and in 1865 the municipal government of Calcutta was placed in the hands of Justices of Peace. The Chamber of Commerce dates

from 1834, and the Port Trust Commission from 1870.

Numerically, Calcutta is, next to London, the largest city in the British Empire. The population of the city alone in 1921 was 907,851; and with the suburbs and Howrah it was 1,327,547. In Calcutta proper there are :—

Hindus	643,013
Muhammadans	209,066
Christians	39,154
Jews	1,820

The increase has been very large since the first census was taken in 1872, but the area of the city has also changed greatly. Early in the last century the population was about 200,000, and in 1850, 400,000.

The Port of Calcutta is one of the leading ports in the East. The site of Calcutta on the left bank of the Hooghly was originally selected for maritime trade; and it is doubtful whether, all things considered, a better site could have been found in this vicinity. The Hooghly carries to the sea the large volume of exports brought to Calcutta by the railways and river steamers; and by it enters the large volume of imports for an extensive hinterland. The port proper extends from Konnagar, 9½ m. N. to Budge Budge (a subsidiary port dealing with petroleum), 13 m. S.; but the jurisdiction of the Conservators of the port approaches extends from Kalna, 60 m. N., at the head of tidal action, down to the Eastern Channel Light Vessel, 126 m. S., where the pilot vessel awaits ocean steamers.

The navigation of the river between Calcutta and the sea is rendered difficult by shifting shoals and sandbanks: these necessitate the maintenance of large suction dredgers, an elaborate and scientific system of survey, and the service of skilled pilots.

The trade of the Port was largely affected by the War, but has now practically recovered. In 1901-2 (excluding inland vessels and coasting craft) 1347 vessels with a gross tonnage of 4,575,267 tons entered the Port; in 1926-27 the number was 1274 and the gross tonnage 6,972,426. In the same period the income of the Port Trust rose from £520,000 to £2,280,000. The value of the total sea-borne trade of the Port has risen from £m.90 in 1901-02 to £m.194½ in 1926-27. The principal articles of export are jute, raw and manufactured, grains and pulses, tea, oil-seeds, hides and skins, opium, shellac, manganese ore and pig-iron. Special mention may be made of the increase in the export of coal which is now almost up to pre-war figures; while there have been substantial increases in the exports of pig-iron and manganese ore. The imports consist chiefly of cotton goods, metals, illuminating and lubricating oils and petrol, machinery, railway materials, hardware, cutlery, paper, and other miscellaneous goods of European manufacture, together with sugar from Java and rice from Burma.

A passenger-steamer service, initiated by the Port Trust in 1907, has a fleet of thirteen vessels, which ply up and down the river from daylight to dark and carry about 10 million passengers during the year. Starting from Chandpal Ghat, near the High Court, a visitor can make an enjoyable trip down the river, or, starting from N. of the Howrah bridge, he can proceed about 7 m. up the river as far as Konnagar.

There are numerous moorings in the stream, thirteen river-side jetties and the Kidderpore Docks with thirty berths. The King George's Dock at Garden Reach (p. 121), which is the latest development, provides for the largest vessels that can navigate the Hooghly.

The Port is administered by a body called the Calcutta Port Commissioners, consisting of a salaried Chairman and Deputy Chairman, and five nominated and twelve elected Commissioners. The present Chairman is Mr S. C. Stuart-Williams, and the Deputy-Chairman Mr T. H. Elderton. This Port Trust is considered one of the most efficient and successful bodies in India.

There are about 250 factories and mills in and, chiefly, round Calcutta, employing over 300,000 daily operatives.

For Municipal purposes the civic administration of Calcutta is vested in the Corporation. This body has been remodelled by an Act passed by the local Legislature in 1923, which came into force in April 1924. The Corporation now consists of eighty-five Councillors, of whom ten are appointed by the local Government and seventy-five elected by the ratepayers, and certain public bodies, and five Aldermen who are elected by the Councillors. At the head of the Corporation are a Mayor and Deputy-Mayor, who are elected for one year by the Councillors themselves. For Executive purposes the Corporation appoints, in addition to officers to whom particular duties are assigned, a Chief Executive Officer, to whom it delegates certain powers, duties or functions, under the Act. For the purposes of electing Councillors Calcutta is divided into thirty-two general constituencies, in addition to which there are several non-territorial constituencies for the representation of the commercial communities. For valuation and administrative purposes the area is divided into districts comprising thirty-two wards, which correspond to the constituencies. The income of the Corporation, which exceeds 114 lakhs of rupees, is derived chiefly from a consolidated rate and taxes on trades and profes-

sions and on vehicles and animals, and there is a municipal debt of about 400 lakhs in the form of loans. The previous Corporation, which was created by the Act of 1899, amply justified its existence, very great improvements having been effected in water supply, drainage, road paving, and conservancy, and municipal amenities generally. The huge elevated iron reservoir at Talla, 2 m. N. of Calcutta, which gives the city a continuous and increased water supply, is the second largest of its kind in the world.

The further improvement and expansion of Calcutta has, by an Act of 1911, been entrusted to a Board of eleven trustees and a Chairman appointed by the Government, with certain guaranteed income from a duty on transfers of immovable property, a terminal tax on passengers, a Customs duty on jute, and contributions from the Municipality and Government. The present (1929) Chairman is Mr J. A. L. Swan, C.I.E., I.C.S. The **Improvement Trust** has devised, and partly or entirely carried through, several important schemes for opening up congested areas, laying out or widening streets and providing open spaces. In Central Calcutta many insanitary areas have been demolished and several fine wide streets have been laid out, the most important of which, Central Avenue, has been completed and opened for traffic from Beadon Street on the N. to Chowringhee on the S., a distance of two miles. Another wide road, running from the Circular Road on the E. to the river Hooghly on the W., and crossing Central Avenue near Beadon Street, is under construction. A park and playground have been completed in Shambazar, and several wide roads driven through that highly-congested area. Several smaller open

spaces and squares have been opened in various parts of the city and two large parks, one in Cossipore and the other in the Karaya area, are under construction. Russa Road has been widened to 150 ft. and now gives a most pleasant drive from Chowringhee to Tollygunge. Extensive improvements have been made in the Bhowanipur area. A large lake and park have recently been completed, and the latter has become a favourite resort for riders and motorists. Model dwellings on a sufficiently large scale have been constructed to house people dispossessed of their homes by the operations of the Trust; and land has been acquired in the suburbs and is being laid out in plots for people desirous of building their own houses. A small improvement scheme has been begun in Burra Bazar, the principal Indian centre of trade and a seriously congested and insanitary area; but, owing to high land values, the cost is likely to be very heavy. The works now in progress are experimental, and will show how far the Trust, with the resources at its disposal, is in a position to deal adequately with a problem which has become acute.

Calcutta is situated in lat. 22° 34', long. 88° 24'. It is the headquarters of the Government of the Presidency of Fort William in Bengal. The first Governor was Lord Carmichael of Skirling, who took over charge from Sir F. W. Duke, the last Lieutenant-Governor on 1st April 1912. The Earl of Ronaldshay held office from 1917 to 1922 and the Earl of Lytton from 1922 to 1927. The present Governor is H.E. Sir Francis Stanley Jackson, G.C.I.E. The transfer of the capital of India from Calcutta to Delhi, and the creation of a Presidency of Bengal were announced by the King-Emperor at His Majesty's Darbar at Delhi on 12th December 1911,

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area. Several smaller open | at Delhi on 12th December 1911,

and, though this affected Calcutta to a certain extent, His Majesty, in replying to the Corporation's address in Calcutta, declared that it "must always remain the premier city of India." The description is not undeserved. Calcutta is pre-eminently the embodiment of the British Raj in India. There are few pleasanter places in the East during the cold weather months (Nov. to March); all the amenities of civilisation are at hand; and she is the home of a large and influential European mercantile community, whose counterpart will be sought in vain in New Delhi or in the sister Presidency towns of Bombay and Madras.

Arrival in Calcutta.

The terminal station, at which the mail trains from Bombay, Delhi and Madras complete their journey, is at **Howrah**, on the right bank of the river Hooghly. This station, which has been greatly enlarged and improved of recent years, is used both by the East Indian and the Bengal-Nagpur Railway systems. The river is crossed by the famous **Pontoon Bridge**, which was constructed by Sir Bradford Leslie in 1874 at a cost of 22 lakhs of rupees. The middle section is movable so as to admit of the passage of vessels up and down the river. At either end of the bridge are bathing ghats which are thronged of a morning and evening. The traffic over the bridge is unceasing, and both vehicles and pedestrians are of every conceivable class and character. On the other side of the bridge, the **Strand Road** runs from N. to S. along the left bank of the river, the European residential quarter lying to the W. past the Esplanade. Direct access to **Sealdah Station**, the terminus of the Eastern Bengal Railway system (for Darjeeling, Dacca, Chittagong, and Assam, Route 24) is afforded

by the **Harrison Road**, which runs from the bridge E. to W. almost in a straight line and cuts through the heart of the purely Indian quarter. It was completed in 1892 and is named after Sir Henry Harrison, who was Chairman of the Corporation at the time.

The Maidan and Quarters East and South.

The centre of Calcutta is the famous **Maidan** (plain, or park), bounded on the W. side by the Hooghly river and the Strand Road, and on the E. side by Chowringhi Road; it is nearly 2 m. long, and is $\frac{3}{4}$ m. broad at its head, and $1\frac{1}{4}$ m. broad at the S. end. Government House, the residence of the Governor, faces it on the N., while Belvedere, where the Lieutenant-Governors of Bengal lived, and which is now occupied by the Viceroy on the occasion of his visits to Calcutta, is not far removed from the Southern limit. In the centre of the W. side is Fort William, and on or near the E. side are hotels, the United Service and Bengal Clubs, the Army and Navy Stores, the Indian Museum and the Cathedral; in the N.W. corner are the Eden Gardens, and on the S., from W. to E., are the Race-course, the Military Station Hospital, the Presidency General Hospital, the Victoria Memorial (on the site of the old Presidency Jail), and the Calcutta Club. Another main road, known as the Red Road, runs down the centre of the Maidan from N. to S., and joins the Queen's Way, where Lord Curzon's statue (by Hamo Thornycroft) faces the Victoria Memorial. The broad gravelled walk on the W. of the Red Road is called Secretary's Walk, and dates back to the year 1820.

The **Eden Gardens**, for which Calcutta is indebted to the sisters of Lord Auckland (hence the

Indian name, Lady Bagan), are beautifully laid out, and many years ago were the principal evening gathering-place of Calcutta society. In them is the ground of the Calcutta Cricket Club, and on the side of the water is a picturesque Burmese Pagoda brought from Prome, and set up here in 1856. Opposite the S.W. gate is Theed's statue of Sir William Peel, the famous Commander of H.M.S. *Shannon*, who served with his crew at Lucknow under Sir Colin Campbell (p. 443), and died of smallpox at Cawnpore after the final relief of the Residency; and on the N. side are the statues of Lord Auckland (Weekes), Lord William Bentinck (Sir R. Westmacott) and Lord Canning (Foley and Brock), is N.E. of the gardens. W. of these, on the river-bank, are Babu Ghat (where is a swimming-bath), the boathouse of the Calcutta Rowing Club, the fine Outram Landing Ghat, constructed by the Port Commissioners for the convenience of passengers arriving and leaving by sea-going steamers, and Chandpal Ghat, affording a fine view of the river. The old Ghat, which was for seventy years the official landing-place of the Governor-General and his Councillors, the Commander-in-Chief, and the Judges of the Supreme Court, has been replaced by a modern erection. It was here that the first members of the Supreme Council sent from England, and Sir Elijah Impey and the Judges of the Supreme Court, landed in October 1774. A little farther up the Strand Road the building of the Imperial Bank faces the Hooghly. From Chandpal Ghat the broad Esplanade Row leads to the E., passing the High Court, the Town Hall, and Government House, and ending at Dhurumtolla Street, from which point Chowringhi Road leads S. along the E. side of the

Maidan. The new Central Avenue, cutting through Bentinck Street and running parallel with Chitpur Road, leads to the extreme N. of the city. To the E. of Bentinck Street lies the Chinese quarter with a Chinese temple; but the visitor is not recommended to visit it, unless accompanied by a suitable cicerone.

The **High Court**, built in 1872 after the Town Hall at Ypres, is a fine building, since considerably extended, with a tower 180 ft. high. The extension is connected by an over-bridge, and contains the Sessions Court, one other Court and offices. The Chief Justice's Court is in the S.W. corner. The Courts of Original Jurisdiction are at the S.E. corner. In the E. face is the Bar Library. The Attorneys' Library is in the E. corner; and here is a portrait of Mr Justice Norman, who was assassinated in 1871 on the steps of the Town Hall. Throughout the building are the following portraits: In the Judges' Library: Sir W. Comer Petheram (C.J. 1886-96, by C. W. Furse), Sir Robert Chambers (C.J. 1791-99, by Robert Home), Sir Lawrence Peel (C.J. 1842-53, by Grant), Sir William Burroughs (J. 1806-15, by Sir T. Lawrence), Mr John Herbert Harington (J. 1801-7 and 1824-5), Sir Edward Ryan (J. 1827-33, C.J. 1833-43, by Sir M. Shee), Sir H. Russell (J. 1797-1806, C.J. 1806-13, by Chinnery), and Sir Charles Pontifex (J. 1872-82). In the Judges' luncheon-room: Sir Lawrence Jenkins (J. 1896-99, C.J. 1908-1916). In the Registrar's Room: Mr C. B. Trevor (J. 1856-67), Sir Robert Fulton (J. 1893-1908), Mr J. R. Colvin (J. 1849-53). In the C.J.s. Court: Sir J. Anstruther (C.J. 1797-1806, by Home), Sir Elijah Impey (C.J. 1773-83, by Zoffany), Sir R. Garth (C.J. 1875-86, by Hon. John Collier). In the Fourth Court: Mr Justice Sambhu Nath

Pandit (1863-67), the first Indian Judge. In the old Sessions Court : Sir F. W. Macnaghten (J. 1815-25, by Chinnery). In the new Sessions Court : Sir Elijah Impey (by Tilly Kettle). At the head of the staircase is Chantrey's statue of Sir Edward Hyde East (C.J. 1813-1821). Among the records of the Court is that of the trial of Nuncomar, by Sir Elijah Impey and two other judges and a jury (on loan to the Victoria Memorial Collection). Inquiries may be made from the caretaker, at the S.W. corner of the ground floor. A fine view over the city can be had from the corner turrets.

At the head of Old Post-Office Street (the "Lincolns Inn" of Calcutta) is a fountain with a medallion portrait of Mr William Fraser MacDonell of the Bengal Civil Service (J. 1874-86), who won the Victoria Cross at Arrah in 1857 (see p. 61) and died in 1894.

The **Town Hall**, standing W. of Government House, was completed, as an inscription in English and Urdu on the S. façade records, "under the Government of Lord Minto in the year of Christ 1813." Its construction was determined upon by the inhabitants of Calcutta as early as 1804 : and the cost, which amounted to 7 lakhs of rupees, was met by a lottery which was announced in the following year "under the patronage and sanction" of Lord Wellesley, who was then Governor-General. The style is Doric, with a fine flight of steps leading to a portico on the S. The carriage entrance is to the N. under a portico. The centre of the building is occupied by a fine upper hall, 162 ft. long and 65 ft. broad, which has been temporarily adapted for use as the Chamber of the Bengal Legislative Council. In the lower hall is a seated statue, by Geflowski, of Maharaja Ramanath Tagore : in the lower vestibule are busts of John Palmer,

by Chantrey, and C. B. Greenlaw (pioneer of steamer communication with India), by Weekes. Proceeding upwards, the bust of H. T. Prinsep, the elder, is passed on the left-hand staircase, and the busts of Sir Henry Cotton (Armstead), Sir Proby Cautley and Sir W. Casement, are in the upper lobby. Within the Council Chamber are to be found a replica of Devis' famous picture of Warren Hastings,¹ and portraits of King Edward VII. and King George V., flanked by portraits of Lord Carmichael, Lord Ronaldshay, and Lord Lytton (the first three Governors of Bengal under the Reform Scheme). The following pictures hang on the staircase and in the corridors : Lady Lansdowne and Lady Dufferin, by J. J. Shannon, Lady Minto, by Laszlo, the ninth Lord Elgin, W. W. Bird, Sir H. M. Durand, General Hewett, Sir C. Allen and Sir H. Harrison (Past Chairmen of the Corporation) ; Rev. K. M. Banerjee, Sir Lawrence Peel and Sir Edward Ryan (C.Js. of the Supreme Court) ; Bishops Wilson and Johnson, Sir Rivers Thompson, Sir W. Grey and Sir E. Baker (former Lt.-Govrs. of Bengal), Sir H. Ricketts, Gen. Sir W. Nott, C. H. Cameron (Macaulay's colleague), Sir Henry Norman (who refused the Viceroyalty in 1894) and a charming picture of Dr Wm. Twining. Apart from the Victoria Memorial Collection, this is the only public collection of pictures in Calcutta. A Council Chamber is being built on the open space to the S. of the Town Hall, behind the statue of Lord William Bentinck and to the W. of the statue of Lord Ronaldshay. A third statue, that of Mr E. S. Montagu, by Lady Hilton Young, will find a place in the immediate vicinity.

Government House, the official residence of the Governor of

¹ The original is now at Viceregal Lodge, Delhi.

Bengal, formerly of the Viceroy, is situated in a fine enclosure of 6 acres, standing back from the Maidan. On the S. are the statues of Lord Lawrence (Woolner), Lord Canning, and Lord Hardinge (one of Foley's masterpieces), opposite which is the Cenotaph erected to the memory of citizens of Calcutta of British descent who fell in the Great War.

Government House was begun in 1799 under the Marquis Wellesley (the architect being Captain Charles Wyatt of the Bengal Engineers), and finished in 1802, the design being copied to a limited extent from that of Kedleston Hall, Derbyshire, built by Adam. The *Dining-room* is of white chunam, with a floor of veined white marble. On either side are six marble busts of the Cæsars, popularly, but quite erroneously, believed to have been taken from a French ship at the end of the 18th century. The *Throne-room* is so called from its containing the Throne of Tipu Sultan. The art collection, which comprised many portraits of past Governor-Generals, has been removed and distributed among the Viceroy's residences at Simla and Delhi.

Above the dining-room and the adjoining rooms is a splendid ball-room. The floor is of polished teak, and the ceilings are beautifully panelled, after designs by Mr H. H. Locke. The crystal chandeliers, of which many have been removed for use at Delhi, were bought in 1801 at the sale of General Claude Martin's effects at Lucknow (p. 460).

On the N. side of Government House is a fine brass 32-pounder, taken at Aliwal, and inscribed in Gurmukhi. On either side is a 6-pounder brass tiger-gun, taken from Tipu Sultan. There are also two large brass guns inscribed "Miani, 17th February" and "Hyderabad, 30th of March 1843"; and another with a car-

riage representing a dragon, which is a trophy of the peace of Peking, 1842.

At the corner of Old Court House Street and Esplanade East is a large block of flats and offices, known as Esplanade Mansions: next, the Locke Buildings (Walter Locke & Co.), and the premises of Messrs Thacker, Spink & Co. Nearer Dhurrumtolla is a fine block of Government Offices, in which the **Imperial Library** is now located: tickets of admission to the Reading Room are freely granted to visitors.

At the N. angle of Dhurrumtolla Road is a large mosque erected during the Government of Lord Auckland, by Prince Ghulam Muhammad, son of Tipu Sultan (killed 1799), in gratitude to God, and in commemoration of the Honourable Court of Directors granting him the arrears of his stipend in 1840; the new Central Avenue has effected a clearance round it, and its architectural merits can now be studied. On the N. side of the Maidan are the Curzon Gardens, laid out on the site of what was an insani-tary tank, with the tramway terminus on the E. The *Ochterlony* Monument on the S. is a column 165 ft. high, raised in 1823 in honour of Sir David Ochterlony, who brought the Nepal war (1814-16) to a successful conclusion, and was afterwards Resident in Malwa and Rajputana. From the galleries a fine view over Calcutta is obtained.

At the head of Chowringhi Road are the premises of Messrs Whiteaway, Laidlaw & Co., and beyond the Continental and Grand Hotels in Chowringhi Road is the Indian Museum. In front of the Museum on the Maidan are the Monohar Das Tank (excavated at the cost of a Benares banker in 1793) and further to the N. at a junction of roads, T. Thorneycroft's statue of Lord Mayo (Viceroy, 1869; assassinated, 1872). To the E. of

them lie the municipal offices, containing a Council Chamber fashioned after the Chamber of Deputies in Paris, and the Sir Stuart Hogg Market, which, particularly the picturesque fruit-stalls, is full of interest to the visitor from the West; the Empire Theatre, the Elphinstone Picture Palace, the Hindustan Insurance Buildings where the Calcutta Fire Brigade is housed; and beyond them, on Wellesley Street (which with Wellington, College, and Cornwallis Streets form the second great thoroughfare from S. to N.) stands the Muhammadan College, known as the Calcutta Madrasa, and founded by Warren Hastings in 1781.

The **Indian Museum**, an immense building (known to Indians as the *Jadu Garh*, or house of magic), stands at the corner of Chowringhi and Sudder Street. The entrance is from Chowringhi Road by a pillared vestibule, in which are installed the oldest and most archaic sculptures—the lion and bull capitals of the column of Asoka (B.C. 274-237) from Rampurwa (N. Bihar) and Sarnath (cast), the Wishing Tree from Besnagar and colossal archaic male and female figures in the round from Patna, Besnagar and Muttra (cast). The ground floor of the quadrangle has a colonnade in Italian style and surrounds an open turfed space. The N. side of the colonnade is occupied by *Geological Galleries* (the Mineral and Meteorite Galleries), the E. side by a *Zoological Gallery* (the Invertebrate Gallery) and the S. side by *Archæological Galleries* (the Gupta, Asoka, and Inscription Galleries). Another Archæological Gallery (that of the *Bharhut Stupa*)¹ opens direct from the vestibule on the S. side, as does also a Geological Gallery (that of the *Siwalik Fossils*) on the N. The

Bharhut Stupa Gallery leads to the *Indo-Scythian Gallery*, which has another extensive gallery on its S., devoted also to archæology, and is surrounded by a hanging balcony, from which at the S. end a few steps lead to a strong room in which the *Collection of Coins* is kept. The N.E. corner room in the ground floor of the main building is the *Insect Gallery*, which leads by a bridge to the first storey of the Sudder Street Block, in which is the *Ethnographical Gallery*. In the centre of the landing on the first floor of the Main Building stands a marble statue of Empress Victoria. Behind the statue is the entrance to the *Library of the Zoological Survey of India*, containing a collection of about 20,000 volumes. N. and S. from the library extend galleries in which *Zoological Collections* are stored for purposes of research. (Admission obtainable through the Director, Zoological Survey of India.) On the N. side is a gallery containing *Fossils*; in the N.E. corner room is the *Small Mammal Gallery* from which a bridge extends to the *Industrial Gallery* in the second storey of the Sudder Street Block. The *Large Mammal Gallery* occupies the E. side; while the S. end contains the *Bird and Reptile* and the *Fish Galleries*. The first floor of the new wing is allotted to the *Art Section*, and may be entered from the Fish Gallery. This is the *Artware Court*, where art collections are shown in three main classes—(1) textiles, (2) metal, wood, ceramic, etc., and (3) pictures.

The second floor extends along the whole length of the W. side of the Main Building and the new wing. There is a large public lecture-hall on this floor, the rest of which is devoted to the laboratories of the Zoological and Anthropological Section, the offices of the different departments, and a large gallery in this, at the S. end,

¹ See Fergusson's *Ind. Arch.*, i. 104-110.

is in the occupation of the Art Section.

The Sudder Street block, besides containing the Ethnographical gallery on the first storey and Industrial Gallery on the second, houses a library, herbarium, laboratory and offices of the Industrial and Botanical Sections.

The E. block of three floors houses the offices, laboratories and the library (30,000 vols.) of the Geological Survey of India, the exhibits of the Section being shown in the four galleries, the Siwalik, the Meteorite, the Mineral and the Fossil Galleries in the Main Buildings. There are now in the Museum about 15,000 specimens of minerals, over 33,000 of rocks, 14,000 of microscope slides, and over 112,000 of fossils. Complete Catalogues of the various Sections are obtainable.

To the south of the vestibule, at the entrance, is the Bharhut Gallery, wherein have been reconstructed parts of the great railing round the stupa of Bharhut in Nagod State in Central India, with original stones brought from the site. These stones bear bas-reliefs that illustrate scenes from the pre-births (jatakas) and the last birth of Gautama Buddha, with labels in ancient characters. Within the Bharhut Gallery are exhibited some of the carved stones of the old railing round the Bodhi tree at Bodh-Gaya, casts of friezes in the ancient caves of Orissa, and casts of some of the ancient bas-reliefs of Sanchi. These sculptures date from the second to the first century B.C.

In the room to the south of the Bharhut Gallery are displayed Græco-Buddhist sculptures from Gandhara (Peshawar District) dating from the first century A.D. and later. To the east of the Gandhara room is the Gupta Gallery, in which in successive pairs of bays are exhibited in chronological order sculptures from the stupa of Amaravati, from Sarnath of

the Gupta period and later mediæval sculptures from Bihar, Bengal, Orissa, Southern India, Java and Cambodia. In the room east of the Gupta Gallery are displayed Sanskrit, Arabic and Persian inscriptions.

On the ground floor of the new wing, to the south of the Gandhara Room, is the spacious New Hall in which are exhibited miscellaneous antiquities of all ages from the palæolithic age to the 18th century A.D. On the walls of the southern balcony of the New Hall are displayed casts of the edicts of Asoka. Adjoining the balcony is the strong room, wherein is deposited the extensive and magnificent collection of Indian coins belonging to the Museum. Architectural pieces are exhibited in the eastern veranda of the main quadrangle and additional specimens of later mediæval Buddhist and Brahmanic sculptures from Bihar and Orissa in the southern veranda.

Amongst the Siwalik Fossil Remains may be observed the Hyænarctos or Hyæna-Bear; the Amphicyon, a dog-like animal as large as the Polar bear; the Machairodus or Sabre-tooth tiger, whose canine teeth were 7 in. long; also the Siwalik cat, which was at least as large as a tiger. There is the skeleton of an elephant 11 ft. high. Amongst Siwalik birds there are the shank-bone and the breast-bone of a wading-bird as big as an ostrich. This bird has been called the *Megaloscelornis*, and these bones are the only ones belonging to this species existing in the world. The Museum is particularly rich in fossil remains of the elephant, hippopotamus, rhinoceros, giraffe and pig, and contains interesting remains of Siwalik apes. The remains of the *Crocodylus crassidens* are those of an extinct species of enormous dimensions. There is also a specimen of the Siwalik

Colossochelys, a gigantic tortoise of prodigious size. It will be noticed that whereas all the species and many of the genera of the Siwalik Mammals and Birds are entirely different from those inhabiting the earth, all the genera of the Reptiles have living representatives in India. The Collection of the Fossil Vertebrata of the Siwaliks is the most complete and comprehensive in the world. The upper Palæontological Gallery contains the remains of the Invertebrates and Plants from the stratified rocks of the Indian Empire, which range from the Cambrian to the Tertiary period, and also large collections of fossils from foreign countries. Amongst the Indian specimens the following are worthy of special attention: the magnificent collection of Gondwana plants, the fossils from the Productus Limestone of the Salt Range, the South Indian cretaceous and the various fossiliferous rocks of the Himalayas and Burma.

Representatives of all the rocks and minerals found in India are displayed in the Geological Section. The collection of zeolites, and that of meteorites, of which over 400 falls are represented, are among the finest in the world.

The adjoining **Economic Galleries** contain fine samples of the products of indigenous manufactures. The Indian museum is visited by over half a million of persons annually. To the S. is the Bengal School of Art, an Institution similar to that of Bombay, with over 300 pupils.

At the corner of Chowringhi and Kyd Street is the United Service Club House, founded in 1845, and just beyond it, at the corner of Park Street, is the **Bengal Asiatic Society**. This institution was established in 1784 by Sir William Jones, and led to the foundation

of the Royal Asiatic Society in London by H. T. Colebrooke. Visitors can be elected members. The *Asiatic Researches* began to be issued in 1788, and continued to be published until 1839. The *Journal* began in 1832, under the auspices of Professor H. H. Wilson and James Prinsep, who first deciphered the famous rock and pillar inscriptions of King Asoka, and from that time to 1839 both publications were issued. The library contains over 15,000 volumes, and there is a large collection of valuable MSS., coins, copper plates, pictures, and busts. The bulk of the Arabic and Persian MSS. formed part of Tipu Sultan's Library: and there are also MSS. in Sanskrit, Burmese, Nepalese and Tibetan. The pictures, which are well worth a visit, include portraits of Warren Hastings, by Tilly Kettle, and Sir William Jones as a boy, by Sir Joshua Reynolds.

In Middleton Row, which is reached by turning down Park Street, are **St Thomas's Roman Catholic Church**, a handsome building commenced in 1841, and the Convent of Our Lady of Loretto (formerly the residence of Sir Elijah Impey).

Near the E. end of Park Street, on the right, is **St Xavier's College**, with a fine science laboratory and astronomical observatory. In one of the old cemeteries (remarkable tombs) on the S. side at the end of Park Street is buried Landor's Rose Aylmer (died 1800); the grave is marked by a column spirally fluted. Here also lie Lucia, the wife of Robert Palk, idylised by Mr Rudyard Kipling, Sir John Clavering, Colonel and Lady Anne Monson, Sir William Jones, Lemaistre and Hyde (two of the judges who condemned Nuncomar), Charlotte Barry, the mistress of William Hickey, the

writer of the *Memoirs*, and Augustus Cleveland (p. 472). These tombs are mostly in the corner formed by the junction of Park Street and Rawdon Street. In N. Park Street Cemetery, opposite, is the grave of W. M. Thackeray's father, who died 1815.

In front of the W. end of Park Street, facing the Maidan, is the spirited equestrian statue of Sir James Outram (by J. H. Foley) and farther on, facing the E. approaches to Fort William, that of Lord Dufferin (by Sir E. Boehm), N. of which, on the Red Road, are the statues of Lord Roberts (by Harry Bates),¹ Lord Kitchener, Lord Ripon (by Derwent Wood), Lord Minto (Goscombe John), and Lord Lansdowne (by Bates and Onslow Ford).

Chowringhi Road, the old residential quarter *par excellence* of Calcutta society,² runs S. from Park Street, past the Bengal Club (founded 1825, and occupying the site on which Lord Macaulay once lived), to St Paul's Cathedral. Half-way is the building of the Army and Navy Stores.

At the extreme S.E. of the Maidan is **St Paul's Cathedral**, which was designed by Major W. N. Forbes in 1819, commenced in 1839, and opened in 1847; it is 240 ft. long and 80 ft. broad, and the spire is 200 ft. high. The building cost £50,000, of which the Bishop gave £20,000, half of which, however, went to endowment. The style is spurious Gothic modified to suit the climate of India. In the vestry of the Cathedral is a large folio MS. volume entitled "History of the Erection of St Paul's Cathedral," which contains a plan of the Cathedral at p. 265. Over the porch is a library, left to the

public by Bishop Wilson, and here is an excellent bust of that Bishop. The great west window, designed by Sir E. Burne-Jones, was erected in 1880 by the Government of India as a memorial to Lord Mayo. The original East window was given by the Dean and Chapter of Windsor, to whom it was presented as a gift by George III. for St George's Chapel. Beneath it are mosaics. The Communion Plate was given by Queen Victoria. The handsome episcopal throne is a memorial to Bishop Johnson (1876-98). The grave of Bishop Wilson is on the N. side of the sanctuary.

On the left side of the vestibule is a black marble tablet to sixteen officers of the Bengal Engineers, who fell during the Indian Mutiny in the years 1857-58. It is ornamented with sixteen bronze medallions and a relief representing the gallant blowing up of the Kashmir Gate, Delhi, by Lieutenants Salkeld and Home (p. 296). Next are a tablet to fifteen officers who fell in the Bhutan campaign and an elaborate monument in memory of John Paxton Norman, of the Inner Temple, officiating Chief Justice of Bengal, who was assassinated on the steps of the Town Hall when entering the High Court (then located there) on 20th September 1871. Beyond is the tablet to seven officers of the 68th Bengal Infantry "who died during the Mutiny of the Native Troops, and subsequent operations, from 1857 to 1859, some on the field of battle, some by the hands of their own followers, others from disease—all doing their duty."

Then follows a tablet to William Ritchie, of the Calcutta Bar and Inner Temple, who died in 1862, a member of the Council of the Governor-General, the inscription by W. M. Thackeray, who was a cousin of Mr Ritchie. On the left is a tablet to Sir H. M. Lawrence, adorned with a medal-

¹ A replica of this statue has been erected on the Horse Guards Parade in London.

² It was from the spacious houses in Chowringhi that Calcutta obtained its name of "The City of Palaces."

lion portrait in white marble. In the centre of the left wall of the passage from the vestibule to the transepts and body of the Cathedral is a monument to the eighth Lord Elgin, who died at Dharmasala in 1863 when Viceroy. The inscription on the memorial tablet to Patrick Vans Agnew of the Bengal Civil Service, and Lieut. Anderson of the Bombay Fusiliers, who were murdered at Multan in 1848, was composed by Macaulay.

There is also in the centre of the transept a good statue of Heber, the second Bishop of the Diocese, by Chantrey.

Among comparatively recent memorials is one of Sir John Woodburn, Lieutenant-Governor of Bengal (1898-1902), and another erected by Lord Curzon (who wrote both the inscription and the verse) to the members of Lumsden's Horse who fell in the S. African War. The organ is one of the finest ever made by Messrs Willis. The upper part of the steeple fell during the great earthquake of 12th June 1897, but was restored.

The continuation of the main road, on the E. of the Cathedral, known as Russa Road, leads through Bhowanipur to the suburb of Tollygunge (4 m. from Government House). This is the old "pilgrim's path" to Kalighat. On the left of the road is the London Missionary Society's Institution. Tollygunge has become a popular resort for the European community, who frequent the Gymkhana Club and the Royal Calcutta Golf Club in large numbers. The ruins of the palaces once occupied by the eleven sons of Tippoo Sultan are in this suburb. On the Lower Circular Road, running to the E. of Chowringhi, and leading to Ballygunge, a popular suburb, are the Bishop's College and the Martinière Schools. The Lower Circular Road turns N. and considerably farther on is St James' Church. In the cemetery

in the Lower Circular Road (on the right-hand side) are buried Sir Wm. Macnaghten, murdered in Kabul, James Wilson, the financier; Justice Norman; and Sir John Woodburn.

Kalighat, celebrated as the site of a temple in honour of the goddess Kali, the wife of Siva, lies about 1½ m. S. of the Cathedral, on the bank of Tolly's Nulla, an old bed of the Ganges.

The place, after which Calcutta is named, derives sanctity from the legend that when the corpse of Siva's wife was cut in pieces by order of the gods, and chopped up by the disc (*sudarsan chakra*) of Vishnu, one of her fingers fell on this spot. The temple is supposed to have been built about three centuries ago. A member of the Sābarna Chaudhury family, who at one time owned considerable estates in this part of the country, cleared the jungle, built the temple, and allotted 194 acres of land for its maintenance. A man of the name of Chandibar was the first priest appointed to manage the affairs of the temple. His descendants have now taken the title of Halidar, and are at present the proprietors of the building. The principal religious festival of the year is on the second day of the Durgapuja, in October, when the temple is visited by crowds of pilgrims.

The **Victoria Memorial** takes its place as one of the great buildings of the modern world. Standing in its own grounds, west of the Cathedral, on the site of the old Presidency Jail, it dominates southern Calcutta. To Lord Curzon its conception is due, as a treasure-house wherein are displayed a collection of pictures, statues, historical documents and other objects of interest illustrative of Indian history and especially of that of the Victorian era; also the greater part of this collection.

The funds for its construction, amounting to seventy-six lakhs of rupees, were voluntarily subscribed by the Princes and Peoples of India. The architect was Sir William Emerson, and the work was entrusted to Messrs Martin & Co. of Calcutta, who executed it under the supervision of Mr V. J. Esch, C.V.O., the Superintending Architect. His Imperial Majesty King George V., when Prince of Wales, laid the foundation-stone on the 4th January 1906; and H.R.H. the Prince of Wales, on the 28th December 1921, formally opened the building. The design is chiefly Renaissance in character, though traces of Saracenic influence can be discerned. The exterior is of polished marble quarried at Makrana in the State of Jodhpur, where for many years the builders maintained an extensive plant and an army of workmen to provide the necessary material. The ornamental groups of statuary over the entrance porches and figures surrounding the dome were designed and executed in Italy.

The figure of Victory, standing 16 ft. high and weighing 3 tons, surmounts the dome, and revolves upon its own base, a sphere 2 ft. in diameter. From the ground level to the base of the figure of Victory is 182 ft. The dimensions of the hall itself at the corner towers are 339 ft. by 228 ft.

The entrance is on the N. past a bronze statue of Queen Victoria by Sir George Frampton, R.A., which is flanked by two tanks; the surroundings of the statue and the gates were designed by Mr Esch. On either side of the bridge on which the statue stands and also on either side of the portico are finely-executed bronze reliefs by Sir W. Goscombe John, R.A., which were originally intended for the pedestal of the statue of Lord Minto on the Red Road. In the lobby the visitor will find bronze busts of King Edward VII. and

of Queen Alexandra and marble statues of King George V. (Mackennal), and of Queen Mary (Frampton). The busts, which are by Sydney March, are the gift of the present King-Emperor, and the statues were presented by H.H. The Aga Khan. The model of the Memorial is interesting, as showing the completed design with the corner towers surmounted by the cupolas, which have yet to be erected. The antique clock is a fine specimen by Whitehurst of Derby (F.R.S., 1713-1788).

To the right, in the Royal Gallery, is a collection of paintings representing events in the life of Queen Victoria, the gift of King Edward VII. Queen Victoria's piano and writing-desk occupy the centre of the room, while on the south wall hangs Verestchagin's masterpiece, depicting the State entry of King Edward VII. when Prince of Wales into Jaipur in 1876. This exhibit, which was presented by the Maharaja of Jaipur, should on no account be missed, as it is one of the finest works of art in Calcutta.

On the opposite side of the entrance hall a collection of Persian books will be of interest to the antiquarian, and among the pictures on the walls will be found portraits of Holwell (by Reynolds), of Lord Clive (after Dance, R.A.), of the King of Oude and the Nawab of Arcot, both presented by H.M. the King, of Dwarka Nath Tagore (1795-1846, a notable of Bengal, whose enlightenment was in advance of his time), of Sir Henry Rawlinson (1810-1894), and of Lord Lake (1744-1808). To these has lately been added a portrait by Reynolds of Major-General Stringer Lawrence (1697-1775), the "Father of the Indian Army," which was bequeathed by Lord Curzon. The statues in the corners are of Lord Wellesley and of Lord Dalhousie; and between them has been placed Flaxman's statue of the Marquess of Hastings

(Lord Moira), which stood for many years in the portico of the Dalhousie Institute.

Passing through the Queen's vestibule into the Queen's Hall under the dome, one sees the dignified statue of Queen Victoria at the age when she ascended the throne (the work of Sir Thomas Brock, R.A.) ; this gives the keynote to the whole edifice. On the marble panels in the recesses of the walls are engraved in several languages proclamations to the people of India by Queen Victoria, while the mural paintings encircling the gallery (by Frank Salisbury) illustrate the principal events of her lifetime. These will be better seen across the hall from the gallery itself.

The bronze doors on the two sides of the Queen's Hall are fine examples of modern workmanship, and beyond them on the terraces are groups of marble statuary, with Lord Cornwallis, by John Bacon, junior, as the central figure of the one (on the east) and Warren Hastings, by Sir Richard Westmacott, as the central figure of the other (on the west).

Continuing through the building we come to the Prince's Hall. The marble statue of Lord Clive, by Tweed, a replica of the one in bronze which stands outside the India Office in London, and two French guns captured at the Battle of Plassey are the principal objects on view among the busts of distinguished men which here find place.

On the left is the Darbar Hall, undoubtedly the finest hall in the building. The War enforced economy, but the change from marble to Chunar stone enhances the general effect. On either side of the entrance are hung framed colours of the famous Bengal European Regiment which fought in every battle in Upper India from Plassey until the storming of Delhi in 1857. The art exhibits comprise Miss Eden's water-colour

sketches, Atkinson's mutiny drawings, Daniell's Twelve views of Calcutta in 1786-88, miniatures on ivory, engravings, and a fine collection of Oriental paintings. Philatelists will ask to be shown the stamp collection.

At the end of the Darbar Hall is the historic black stone *musnud*, or throne, of the Nawabs Nazim of Bengal, Bihar and Orissa, 6 ft. in diameter and 18 in. high ; the whole, including the four pedestals, has been hewn out of one block. The Persian inscription cut round the edge records that it was made at Monghyr in the year 1052 of the Hegira (1641 A.D.). It belongs, therefore, to the reign of Sultan Shujah, second son of the Emperor Shah Jahan, who was Subadar of Bengal from 1639 to 1647, and must originally have been kept at Rajmahal (p. 471), whence it followed the Nawabs to Dacca and Murshidabad (p. 479). It was upon this throne (which was presented in 1904 by the Nawab Bahadur of Murshidabad) that Clive installed Mir Jafir after the Battle of Plassey (1757), and saluted him as Nawab Nazim ; and in 1765 he sat upon it side by side with the then Nawab Nazim and proclaimed the assumption of the Dewani (civil administration) by the E.I. Company.

Across the Prince's Hall is one of the Picture Galleries, containing pictures and engravings of Indian scenery by Thomas Daniell (1749-1840, R.A.), and his nephew William (1769-1837, R.A.). Among these the collection of aquatints presented by Queen Mary is of considerable interest. Other paintings include portraits of Sir Elijah Impey by Tilly Kettle (a variant of the one at the High Court), Abu Taleb Khan by Northcote, Rudyard Kipling by Burne-Jones, Burke and Macaulay ; also "The Embassy of Hyder Beck," the "Tiger Hunt near Chandernagore," and "Lord Cornwallis receiving the son of Tippoo Sahib,"

by Zoffany. The models of the Battle of Plassey and of an East Indiaman sailing ship, and the collection of arms and armour supply a variety of interest.

The visitor should now proceed to the Picture Gallery on the first floor, where he will find a collection of paintings of the time of Warren Hastings. These include a portrait of Warren Hastings and his wife in a group and a very fine one of Mrs Hastings, which are both by Zoffany, and a portrait of the great Governor-General in his old age, by Lemuel Abbott. The centre room contains a large collection of engravings, while in the "Calcutta" room at the end will be found a comprehensive series of prints of Old Calcutta and a model of Fort William. Two fine oil paintings by Thomas Daniell, one representing Old Court House Street as seen in 1780, the other depicting the river front opposite the old Fort William, should not be missed.

Among the historic documents in the annexe is the original indictment of Nuncomar for forgery of the bond, which is also on view in original.

A tour of the Gallery round the interior of the dome should be made to view the mural decorations, and those who wish to do so may ascend to the top of the dome. As the door leading to the dome is kept locked, application should be made to the Superintendent at his office in the entrance hall on entering the building. The echo in the space between the outer and inner domes and the whispering gallery inside the circumference of the dome, are both remarkable instances of these phenomena. If time permits, a visit should be paid to the upper galleries. A magnificent view of the Maidan can be had from the balcony over the main entrance.

The southern entrance is formed by a lofty arch surmounted by an equestrian statue of King Edward

VII. by Mackennal, R.A. A second statue of Lord Curzon has been placed here, which is the work of Pomeroy, R.A. Between this and the arch is a naval 4.7" gun, which was captured by the Turks at Kut and subsequently retaken.

The Memorial¹ is open on Sundays and week-days (excluding Mondays) from 10 A.M. to 5 P.M. On Fridays there is a charge of 8 annas, which admits to the whole building. On other days entrance is free, but a charge of 4 annas is made to view a part of the collections. On Mondays the building is closed to visitors.

Immediately to the S. of the Victoria Memorial Hall is the **Presidency General Hospital**, which is open to Europeans of all classes. A large block for paying patients is known as the Woodburn Ward, and Lytton House, which was opened in 1925, accommodates the nursing staff. The Station Hospital for British soldiers, conspicuous by its pillared frontage, is a little farther to the W. on the S. side of the Lower Circular Road; it was formerly the Court House of the Sadar Diwani Adalat, the chief provincial Court of Appeal, which ceased to exist on the establishment of the High Court in 1862. Beyond them and opposite the Race-course the 'Alipur Road, crossing Tolly's Nulla by the Zeerut bridge, leads to the **Zoological Gardens** and **Belvedere**, and the **Agri-Horticultural Gardens**. The Zoological Gardens were inaugurated on 1st January 1876 by King Edward VII. (then Prince of Wales). They comprise an area of 40 acres attractively laid out, and a large collection of animals in houses, some of which have been presented by various Ruling Chiefs and wealthy persons.

¹ The Curator (office on first floor) should be consulted regarding any rearrangement of exhibits. Enquiries may also be addressed to the Superintendent, whose office is on the right of the entrance hall.

There is a fine collection of carnivora, but special attention should be given to the southern extensions, where birds, deer and cattle are grouped under natural conditions. This method of exhibition has recently been developed by the construction of an island enclosure, in the centre of the gardens, about 100 yds. along the broad pathway from the main entrance. Gibbons and orang-outangs may be seen here in practically a wild state, a sight which cannot, it is believed, be paralleled in any other zoological collection. Small charge for admission; a band on Sunday afternoons; light refreshments by F. Peliti & Co. obtainable. On the S. side of the gardens is the 'Alipur Observatory.

Belvedere House, formerly the residence of the Lieutenant-Governors of Bengal, is now only used by the Viceroy on the occasions of his visits to Calcutta. The grounds are open to the public when the Viceroy is not in residence. At a spot W. of the entrance of Belvedere, on the 'Alipur Road, was fought, on 17th August 1780, the duel between Warren Hastings and Sir Philip Francis, in which the latter was wounded. S. of Belvedere are the Agri-Horticultural Gardens, commenced here in 1872, and managed by that Society, which was founded in 1820; and still farther S., off Judge's Court Road, stands Warren Hastings' private residence, known as "Hastings House." It is used to house certain officers of the Government of India. 'Alipur is now a large and favourite residential suburb.

The **Race-course** (1 m. 5 ft. 48 yds.) under the Royal Calcutta Turf Club, is one of the most famous in India. The Christmas race meeting, at which the King-Emperor's Cup and the Viceroy's Cup are run for, is one of the principal social events of the winter

season in Calcutta. Besides the public stands, there is a members' stand, admission to which can only be secured upon an introduction by a member of the Club. The bridge S.W. of the Race-course, across Tolly's Nulla, leads to Watgunge, so called after Colonel Henry Watson, Francis' second in the duel with Hastings, who in 1780 established wet and dry docks here. The docks were afterwards owned by the two East Indian sons of Colonel Kyd, who is supposed to have given his name to the adjoining Dockyard. Between 1781 and 1821 ships were built at these Docks at a cost of more than £2,000,000, and in 1818 the *Hastings*, a 74-gun ship, was launched there. In Kidderpore is St Stephen's Church, and close by is the Military Orphan Asylum, which was the mansion of Hastings' colleague, Richard Barwell.

The last bridge across Tolly's Nulla, near the river, named Hastings Bridge, leads past the Government Dockyard and the long range of Docks, to **Garden Reach**, once known for its palatial suburban residences, and of late years as the home of the last of the Kings of Oudh, Wajid Ali, who was deposed in 1854, and survived his deposition by more than thirty years. On the way are passed the offices of the Bengal-Nagpur Ry. The new **King George's Dock**, which was opened by the Viceroy, Lord Irwin, on 28th December 1928, covers a water area of 190 acres, with a depth of 56 ft. at high tide, and is equipped with thirty-five berths. Alongside the entrance lock are two dry docks.

At the W. extremity of Garden Reach, or in its vicinity, was situated the small fort of 'Aligarh, and opposite to it, on the other bank of the river, was the fort of Tanna, both of which were taken by Clive in the recapture of Calcutta in 1756-7.

St George's Gate of Fort

William (S.W. corner) is $\frac{1}{2}$ m. N. from the Hastings Bridge. On the way is passed Cooly Bazar, near the site of which Nuncomar was hanged for the offence of forgery on 5th August 1775. In front of the gate is a statue of Lord Napier of Magdala (replica in Queen's Gate, London) opposite **Prinsep's Ghat**. This, now some distance inland since the reclamation of the foreshore and the excavation of the new docks, is marked by a pavilion of stone, supported by pillars, and inscribed "James Prinsep," in memory of the great Oriental scholar, who died in 1840 from over-devotion to the pursuits in which he so greatly excelled. A short distance S. of Prinsep's Ghat stands the memorial to the Indian Lascars of Bengal and Assam, who lost their lives in the Great War through enemy action. Farther N., and opposite the Water Gate of the Fort, is the Gwalior Monument, erected by Lord Ellenborough in 1844, in memory of the officers and men who fell in the Gwalior campaign of 1843, and designed by Colonel W. H. Goodwyn, Beng. Eng. It is of brick faced with Jaipur marble, surmounted by a metal cupola made from guns taken from the enemy. In the centre the names of those who fell at the battles of Maharajpur and Panniar are engraved on a sarcophagus.

Fort William originally received its name from William III. The site was changed in 1757, after the battle of Plassey, from that now occupied by the Post-Office to the river-bank farther S., where Clive commenced a new and much more formidable fortress, which was finished in 1773, at a cost of £2,000,000. It is an irregular octagon, enclosing an area of 2 sq. m., of which five sides look landward and three on the river, and is surrounded by a fosse 30 ft. deep and 50 ft. broad, which can

be filled from the river. The garrison in the Fort consists of one British regiment and one company R.G.A. An Indian regiment is quartered at Alipur. There are six gates—Chowringhi, Plassey, Calcutta, Water Gate, St George's and Treasury Gate. There is also a sally port between Water and St George's Gates. A wireless installation has been put up outside the Water Gate. Inside the Chowringhi Gate, past the Governor's residence, now used as a Soldiers' Institute and Garrison School, is the Fort Church of St Peter, built in 1828. The Catholic Chapel, St Patrick's, was built in 1857. The *Military Prison* behind this is built on a massive storehouse, on which is an inscription relating to the amount of rice and grain deposited there by the authorities in 1782. Over the Treasury Gate is the British Infantry regimental officers' mess. The building was formerly the residence of the Commander-in-Chief, and was occupied by Lord Roberts and Lord Kitchener, who constructed the ramp which leads up to it, and laid down the marble floor. The *Arsenal* is worth a visit, for which permission must be obtained from the officer commanding the Fort (residence, Chowringhi Gate). The submarine Mining depot is also accommodated in the Fort; it cannot be visited.

Quarters North of the Maidan and Government House.

To the W. of Government House lie the offices vacated by the Government of India and partly used by the Government of Bengal. To the N. of Government House are Old Court House Street on the E., Wellesley Place in the centre, and Council House Street on the W. These lead to **Dalhousie Square**,¹ with a garden

¹ This was formerly known as the Lal Bagh, and the tank is still known as the Lal (red) Dighi.

and tank in the middle. Wellesley Place, in which are quarters for the Governor's staff and the Central Telegraph Office (on the E. side), faces the Dalhousie Institute. This was built "to contain within its walls statues and busts of great men." These have been transferred to the Victoria Memorial Hall, and the building is used by the Calcutta Trades Association. The foundation-stone was laid in 1865, but the entrance portico preceded it, having been built in 1824 for the statue of the Marquess of Hastings, which is now in the Victoria Memorial Hall and has been replaced by a statue of the Rt. Hon. James Wilson, the financier, which was formerly inside the building. The hall is lined with marble, and measures 90 ft. by 45 ft. Within Dalhousie Square are the statues of four Lieutenant-Governors of Bengal—Sir Steuart Bayley, Sir A. Eden, Sir Andrew Fraser, and Sir J. Woodburn—and the Maharaja of Darbhanga (by Onslow Ford). On the E. side of the square is the Currency Office.

On the S.W. corner, at the junction of Council House Street and Hare Street is the pile of buildings constructed for the Commerce and Industry Department of the Government of India. A Commercial Museum is located here on the first floor (entrance by S. staircase); and there is a Library and Reading-Room in the same building, which is attached to the Commercial Intelligence Dept. of the Government of India. Facing it are the premises of the Hong-Kong and Shanghai Bank.

In the S.E. corner is the Parcel (inward) Post-Office, and on the W. side is the large domed building of the General Post-Office, occupying part of the site of the Old Fort. It cost Rs.630,510, and occupies an area of 103,100 sq. ft. The dome

at the S.E. corner is over 220 ft. high. The Old Fort William lay between Koila Ghat Street, on the S., and Fairlie Place, on the N. Its W. side fronted the river. The W. and E. walls were 710 ft. long, the N. side measuring 340 ft. and the S. side 485 ft. After it was abandoned as a fort it was used as a Custom-house until the river moved away from the site. Part of the original arcades, which served as warehouses on the S.W. side of the interior, may still be seen inside the yard of the Post-Office, where they are used as a waggon-shed; and, where possible, the outlines of the Fort have been indicated by brass rails let into the ground. At the N.E. corner of the Post-Office is a tablet inside an arch, which indicates the actual site of the Black Hole¹ of 1756, which, under the direction of Lord Curzon, has been paved with black marble. The exact size of the room was 22 ft. by 14 ft., and its height was probably 16 ft. to 18 ft.; and into it were forced on the night of 20th June 146 human beings, of whom twenty-three only survived the next morning. The old obelisk memorial of the tragedy, erected by the principal survivor, J. Z. Holwell, was removed in 1821; the present one was placed in front of the Calcutta Collectorate, at the expense of Lord Curzon, in 1902; the inscription has been modified. Holwell, who was Governor in 1760, and the justice of whose removal from the Service by the Directors of the E.I. Company has formed the subject of controversy, died in England at the age of eighty-seven in 1798.

¹ The Black Hole was merely a guard-room of the Fort, and was a portion of a sleeping barrack in the S.E. corner of the Fort, enclosed from the rest of the building. The barrack was situated just to the N. of the S.E. bastion, and the Black Hole was therefore between the bastion and the barrack. Views of the Old Fort and of Holwell's monument are among Daniell's drawings of Calcutta (1786-1792), and may be seen at the Victoria Memorial Hall.

From the N.W. corner of Government House, Hastings Street leads towards the river, past the old Cathedral Church of St John, in an enclosure shaded with trees. In the N. veranda is the *Tomb of Lady Canning*, brought from Barrackpore Park, where it was originally erected over the grave in 1861. It consists of a base of white marble, with a sarcophagus, on which is inlaid a cross with flowers. Outside the Church, to the N. of the W. entrance, is a domed pavilion about 50 ft. high with twelve pillars. The inscription bears the names of fourteen officers who fell in October 1794 during the second Rohilla War.

The church, which was begun in 1783 and opened in 1787, is 136 ft long and 70 ft. wide. It is designed on the lines of St Stephen's Church, Walbrook. The main entrance, which was at the E. end, has been blocked up, although the original portico and ramp for the use of palanquins has been retained. Access to the building is obtained on the W. through an iron gate in Council House Street.

The South aisle has on the left a large picture of the Last Supper, painted and presented to the church by John Zoffany (1733-1810) in which the Apostles are all portraits of certain well-known inhabitants of Calcutta. In the E. end of the nave is the grave of Bishop Middleton, first Bishop of Calcutta (died 1822), and among the many fine memorials are those of Colonel James Achilles Kirkpatrick, Resident at Hyderabad from 1798 to 1805, Alexander Colvin, John Adam (officiating Governor-General, 1823), and others.

In the N.W. corner of the graveyard is the large octagonal mausoleum of Job Charnock, the founder of Calcutta, 24th August 1690, who died in January 1692. In this has been placed the slab which covered the grave of Surgeon

William Hamilton, who in 1716, having cured the Emperor Farukhsiyar, obtained for the E.I. Company the right of importing their goods free of duty, and other great privileges.

A few yards to the S. is the tomb of Admiral Charles Watson, who, with Clive, retook Calcutta (died 16th August 1757). It has a large square base, supporting an obelisk, inscribed to his memory. Close by is the tomb of "Billy Speke," a midshipman on the Admiral's flagship, the *Kent*, who "lost his leg and his life" at the capture of Chandernagore (Fort Orleans) on 24th March 1757. The graves of Bishop Turner (1831) and of three Judges—Sir R. H. Blosset (1823), Sir Christopher Puller (1824), and Sir Benjamin Malkin (1837), the friend of Macaulay—are placed side by side within a railing. A dome covers the grave of "Begum" Johnson, the grandmother of the first Earl of Liverpool (Prime Minister from 1812 to 1827), who was taken prisoner by Suraj-ud-Daula in 1756 and died in Calcutta in 1812 at the age of eighty-seven.

A tablet on the wall of No. 7 Hastings Street commemorates the fact that the house was once the residence of Mrs Warren Hastings. Two finely-painted punkha boards, upon which a hunting scene with elephants is represented, are preserved here, with much of the old furniture.

On the N. side of Dalhousie Square are the buildings of the Bengal Secretariat, known as **Writers' Buildings**.

E. of Writers' Buildings is the **Scotch Kirk, St Andrew's**, situated in Radha Bazar, or called by the natives *Lal Girja*, or Red Church. It cost £20,000, was opened in 1818, and seats 500 persons. In the vestry there is a portrait of Dr James Bryce, the first minister, by Sir John Watson Gordon, and

there are some handsome monuments within the church. It sends a representative to the General Assembly at Edinburgh. Directly E. of the Kirk is the Lal Bazar and its continuation, Bow Bazar Street. Several fine buildings have been erected on this street, among them, about 200 yds. from the corner of Dalhousie Square, the Central offices of the Calcutta police.

A little to the E. of the square, in Mission Row, is the **Old Mission Church**, called the *Purana Girja*, or *Old Church*, in the vernacular. It is 125 ft. long from E. to W., and nearly 82 ft. broad, and seats 450 persons. It was built by the celebrated missionary, Johann Zachariah Kiernander, who was born at Akstad, in Gothland, Sweden, in 1711, and educated at the Universities of Upsala and Halle. Being offered a post as missionary, he left England for India in 1740 and found his way to Calcutta in 1758. His second wife on her death left valuable jewels, with which he founded a school. He called his church, which was consecrated in 1770, *Beth Tephilla*, "House of Prayer." When blind he was deceived into signing a bond which ruined him, and the church was seized by his creditors, but redeemed by Charles Grant (afterwards Chairman of the E.I. Company) for Rs.10,000. Kiernander then went to Chinsura, and died in poverty at Calcutta in 1799. There is a window in the church presented by his grandson, and a curious engraving of him, with an inscription in German, hangs in the Vestry Room. There are many interesting tablets in the church, particularly one to Charles Grant, and others to the Rev. Henry Martyn (1781-1812), Bishop Dealtry of Madras (1796-1861), Bishop Daniel Wilson (1778-1858), and an Arab lady of distinction who was converted to Christianity.

The steeple was so seriously

injured by the great earthquake of 12th June 1897 that it was necessary to rebuild it.

Mission Row is one of the oldest streets in Calcutta. Tablets mark the houses once occupied by members of Warren Hastings' Council—Sir John Clavering and Colonel Monson and his wife, Lady Anne.

From the S.W. corner of Dalhousie Square, Hare Street leads also towards the river, and passes the Small Cause Court, to the **Metcalf Hall**, founded in honour of Sir Charles Metcalfe by public subscription, and built 1840-44. The design is copied from the portico of the Temple of the Winds at Athens. The building, which formerly contained a neglected Public Library, was in 1903 converted into an effective Imperial Library at the instance of Lord Curzon. The Library was removed in 1924 to the Government buildings facing Curzon Gardens (p. 112), and the Hall is now used as an office by the Commissioner of Income Tax. On the river front, to the N. of this, are the Sailors' Home and the fine offices of the Port Trust. To the S. is the Imperial Bank of India.

N.W. of Dalhousie Square is the European commercial quarter, and several palatial buildings have been constructed in Clive Street. The principal of these, which are of interest on account of the variety of styles of architecture, are the Graham Buildings, Gillander House, the Chartered Bank, the National Bank of India, the new Stock Exchange, Messrs Martin & Company's buildings, the Oriental Life Assurance Buildings, and the South British Insurance Buildings. The Royal Exchange Building, an imposing structure in Renaissance style, has been constructed for the Bengal Chamber of Commerce, to the N. of the Chartered Bank

Buildings. It stands on the site of a house once occupied by Clive and Philip Francis. In this vicinity, also, are the Synagogue, the Armenian Church of St Nazareth (reached from China Bazar Street, the oldest place of Christian worship in Calcutta, built 1724; tombstone in graveyard, 1630), and the Roman Catholic Cathedral, and a Parsi place of worship. When the Portuguese first came to Calcutta, the English granted them a piece of land in Portuguese Church Street, on which the friars of the order of St Augustine erected a chapel in 1700. Its successor, the **Roman Catholic Cathedral**, was built in 1797, and is dedicated to the Virgin Mary of the Rosary. The Greek Church, which was formerly in Amratolla Street and was built in 1780, has been pulled down, and a new one erected in Russa Road, Bhowanipur (p. 117). The first priest of the church, Father Parthenio, is said to have been the model for the figure of the Saviour in Zoffany's picture at St John's Church. N. of Harrison Road is the Mayo Hospital.

On the Strand Road, extending for about $\frac{1}{2}$ m. from the Imperial Bank, are the principal jetties. We then arrive at the pontoon bridge, which leads across the river to Howrah Station (see p. 109). The road is usually congested with slow-moving traffic, for the bullock-cart has not yet been eliminated as a method of transport. Farther along the Strand Road we come to the **Mint**, which was built 1824-30, the architect being Major W. N. Forbes. The style is Doric, the central portico being copied from the Parthenon at Athens. The area of the building and grounds is $18\frac{1}{2}$ acres. The Mint Master issues passes on application to view the Mint.

From the N.E. corner of Dal-housie Square, Bow Bazar leads

to **Sealdah** station, the terminus of the Eastern Bengal Ry., comprising the N. stn. (for suburban trains), the Main stn. (for N. and E. Bengal), and the S. stn. (for S. section trains). The Campbell Hospital lies to the S. of the station. Half-way down Bow Bazar, College Street crosses it at right angles and leads, to the N., past the Eden, Ezra, and Medical College Hospitals, and the Medical College, to College Square, with a fine tank in the middle.

The Ezra Hospital is for Jews only. The **Medical College Hospital**, with accommodation for over 300 patients, was erected in 1853, and the **Eden Hospital** for women and children in 1882. Other extensions have since been made, including a Surgical Ward, an Eye Infirmary, the Prince of Wales' Hospital, the Electrical Annexe—and the whole now provides adequately for the medical relief of the Indian population. Behind the Hospital is the **College**, with 500 students, one of the principal institutions of the kind in India.

On the N. side of College Square is the **Sanskrit College**, which was founded by Warren Hastings in 1781: and on the W. side are the **Calcutta University**, the **Hare School**, and the **Presidency College**. The University Senate House is a grand hall, 120 ft. by 60 ft., in which the Convocations for conferring degrees takes place. It has a portico supported by six lofty pillars. In the vestibule is a marble seated statue of Prasanna Kumar Tagore, the founder of the Law Professorship. Large structures have been raised in the neighbourhood for the Law College and spacious lecture halls. Close by is the **Hare School**, which is self-supporting. It was erected out of the surplus fees of students. The

Presidency College was developed in 1855 from the Hindu College, founded in 1824, and opened in 1827, at a cost of Rs.170,000. The foundation-stone of the new building of this College was laid in 1872 by Sir George Campbell.

Farther N., in Cornwallis Square, are those of the *Free Church of Scotland Mission*, begun by Alexander Duff in 1830. The Scottish Church is in Wellesley Square. E. of Cornwallis Square and N. of the end of Beadon Street (abutting on Circular Road, which in its upper portion marks the line of the Mahratta ditch, hastily dug in 1742, when these marauders invaded Orissa and Bihar) is Halsi Bagan Road, so called from the gardens of the well-known Omichand (Amin Chand, died 1758), who was tricked by Colonel Clive, in a lane off which are the marble Jain temples in the garden known by the name of Badri Das. The temples, dedicated to the 10th Tirthankar, Sitalnath Ji, and the gardens form one of the prettiest spots in the whole of Calcutta, and should be visited by all who have a spare half-hour.

The Dufferin Zenana Hospital lies considerably to the E., in Upper Circular Road. Lovers of science should visit the **Bose Research Institute** at 93 Upper Circular Road. It was founded by Sir J. C. Bose, F.R.S., and adjoins the **University College of Science**, a fine four-storeyed building, with laboratories for physics, chemistry, applied mathematics, and experimental physiology. The biological laboratories are at 35 Ballygunge Circular Road.

The Botanical Gardens.

The Royal Botanical Gardens, Sibpur, on the W. bank of the river, opposite Garden Reach, were founded

in 1786, on the suggestion of Colonel Kyd, who was appointed the first Superintendent. He died in 1793, and has had a number of eminent successors, who have brought the gardens to a high standard of merit, among them Roxburgh, Buchanan - Hamilton, Wallich, Griffith, H. Falconer, Sir G. King, and Sir D. Prain—all well-known botanists. The visitor may drive to the gardens across the bridge and through Howrah, over the E.I. Railway by a bridge, or may utilise the ferry service from Chandpal or Takta Ghats to the Botanical Garden Ghat, or may cross from Metia Bruz Ghat, $\frac{1}{2}$ m. beyond Garden Reach. At Sibpur is the Engineering (Civil) College, with its classes of mining and other instruction. The area of the gardens is 270 acres, with river frontage of a mile. At the N.W. corner is the Howrah Gate, where are three fine trees—a *Ficus indica* in the centre, with a *Ficus religiosa* on either side. From the College Gate, near the river, an avenue of almond-trees runs along the river front; while an avenue of Palmyra palms to the right of the entrance, and one of mahogany trees to the left, lead to the centre and the memorial of Colonel Kyd, passing the palm plantation, which is separated off by a canal crossed by pretty bridges. From the memorial an avenue of palms leads S. to the Garden Ghat; and close by it are the three conservatories for orchids, large plants, and palms. Leaving the above avenue to the left, the Great Banyan Tree¹ (*Ficus indica*), which covers, ground 1000 ft. in circumference, and is over 88 ft. in height, will be reached. On account of senile decay and fungoid growth the central column was eradicated in 1925,

¹ The name, according to Tavernier (1650), was given to this tree (which is the Hindustani *bar*) from the fact that the *baniyas* or Hindu traders at Gombroon (Ormuz) in the Persian Gulf, built a little pagoda under one of them, which was the only tree that grew in the island.

to preserve the life of the radial parts.

"The fig-tree at this day to Indians known
In Malabar or Deccan, spreads her arms,
Branching so broad and long, that on the
ground
The bended twigs take root, and
daughters grow
About the mother tree, a pillar'd shade,
High over-arched and echoing walks
between."—MILTON, *Paradise Lost*,

On the left of an avenue near it is a monument to Roxburgh, with a Latin epitaph by Heber. Sir J. Hooker writes of these gardens in his *Himalayan Journals* that "they have contributed more useful and ornamental tropical plants to the public and private gardens of the world than any other establishment before or since." He says also, "that the great Indian Herbarium, chiefly formed by the staff of the Botanic Gardens, under the direction of Dr Wallich, and distributed in 1829 to the principal museums of Europe, was the most valuable contribution of the kind ever made to science"; and adds, "that the origin of the tea-culture in the Himalayas and Assam was almost entirely the work of the Superintendent of the gardens at Calcutta and Saharanpur." The Superintendent has a house in the gardens. Near it is the Herbarium, or collection of dried plants, probably the only one in Asia of the first class. There are from 30,000 to 40,000 species represented in it. Attached to the Herbarium is a very fine Botanic Library.

Excursions in the Vicinity of Calcutta.

- (a) *Left bank of the river: By rail from Sealdah, the Calcutta terminus of the Eastern Bengal Rly.*

Dum Dum station (pop. 25,639), 7 m. from Calcutta. The only hotel is the Central Hotel near the aerodrome (very limited accommodation). A municipal town and

Cantonment. It was the headquarters of the Bengal Artillery from 1783 till 1853, when they were removed to Meerut; and their mess-house is known as the *Outram Institute*. A bust of Sir James Outram stands in the veranda.

In the centre of the Barrack Square is a huge gun. Near this is a monument to the officers and men killed in the Khyber whilst returning from Kabul in 1841-2. The treaty which restored the British settlements after the recapture of Calcutta in 1757 was signed at Dum Dum. Lord Clive had a house here, and Fairy Hall was occupied by Sir Henry Lawrence when a Lieutenant. There are an English Church (St Stephen's), a Roman Catholic Chapel, and a Wesleyan Chapel. The Ammunition Factory has been closed.

14 m. from Sealdah **Barrackpore** (population 16,274) is called Chanak by Indians. "The theory that the name is derived from Charnock (the founder of Calcutta on 24th August 1690), who founded a small bazar here, is quite untenable, for Chanak is a common Bengali appellation for a village, and appears as Tchanuk in an old Dutch map of India, drawn early in the 17th century, long before Job Charnock became a known man."¹ The journey may be made also by road, or river, if the traveller can procure a steam-launch, or can utilise the local river steamer services. The trip up the river takes three hours, and is interesting and picturesque. The river excursion may pleasantly be extended to Serampore, Chandernagore, Chinsura, and Hooghly, which are on the opposite bank (see p. 132).

Just before reaching Barrackpore there are some handsome modern temples on the left bank. Then comes the beautiful park (left

¹ *Calcutta, Old and New* (p. 993), by H. E. A. Cotton.



bank), with noble trees, and a small pier as landing-place. At 300 yds. to the S. of the house, under a fine tamarind tree, is a polygonal enclosure, within which is a white marble monument to Lady Canning; it replaces that removed to St John's Church at Calcutta. A Hall, built by the Earl of Minto in 1813, stands 100 yds. to the N. of the house, within a colonnade of Corinthian pillars. Over the outside entrance is a black slab, inscribed—"To the Memory of the Brave."

On the walls are four tablets, erected by different Governors-General to the memory of British soldiers who fell in Mauritius (Isle of France) and Java, 1810-11, and at Maharajpur and Panniar, 1843.

The House, which used to be the Viceroy's country residence, is now occupied by the Governor of Bengal. The original bungalow belonged to the Commander-in-Chief and was appropriated in 1801 by Lord Wellesley, who laid out the park and began to build a "country villa." But this was never completed beyond the lower storey, and the existing building, intended in the first instance as a temporary residence, was enlarged to its present dimensions by the Marquess of Hastings (1813-1823). There are golf-links in the park to which the public are admitted. N. of the park is Barrackpore Cantonment, now occupied by a detachment of British troops. It was first used for military purposes in 1772, when the place received its name. In 1824, during the First Burmese War, the 47th B.N.I., which was ordered on service, mutinied here on the 30th October, on which the Commander-in-Chief, Sir Edward Paget, proceeded (1st November) to the Cantonment with two European regiments, a battery of European artillery, and a troop of the Governor-General's Bodyguard. The mutinous regiment was drawn

up in face of these troops, and was ordered to march or ground arms. On the sepoys refusing to obey, the guns opened upon them, when, throwing away their arms and accoutrements, they made for the river. Some were shot down, some drowned, and many hanged, and the regiment was struck out of the "Army List." In March 1857 there were again mutiny troubles here, and these were checked for the moment by the personal bravery of General Hearsey,¹ commanding the troops. The 19th N.I. and 34th N.I. were disbanded in March and May. It became necessary to disarm all the sepoys at the station on 14th June.²

At Barrackpore there are a church (St Bartholomew's), a Zenana Mission, and a Wesleyan Church; and the Royal Hotel (in the Station Road).

The new **Race-course**, which was opened in January 1927, is the property of the Royal Calcutta Turf Club. It is $1\frac{1}{2}$ m. from Barrackpore station by road; a branch line runs direct to the gates of the enclosure. The course is just 50 yds. short of $1\frac{1}{2}$ m., with easy turns, and is 100 ft. wide, with a straight run in of half a mile. There are two stands, with sloped lawns in front, from which an excellent view of the racing is obtained.

There is a **Small-arm Factory** at Ichapur, 3 m. to the N. of Barrackpore; and at Cossipore $\frac{1}{2}$ m. from Calcutta is a Gun and Shell Factory on the bank of the Hooghly.

369 m. from Sealdah,

Darjeeling; by mail train in 17 hrs. (see Route 24); an interesting week-end excursion; warm clothing should be taken.

¹ General Hearsey, who as a subaltern had taken part in the defence of Sitabaldi (p. 138), had previously shared in the suppression of a mutiny of Bengal Troops at Wazirabad (p. 370) in 1849.

² The 70th B.I. alone remained loyal and volunteered for service in China.

- (b) *Right bank of the river : By rail from Howrah, the Calcutta terminus of the E.I. Rly.*

Howrah (population 195,301) is a populous industrial centre on the right bank of the Hooghly, opposite Calcutta, with over sixty mills employing 100,000 hands, chiefly recruited from up-country. It is the terminus of the E.I.R., and of the B.N. Ry.; light railways to Amta (28 m.) and to Sheakhala (20 m.). Bishop Heber (1823) described Howrah as "Chiefly inhabited by shipbuilders, but with some pretty villas interspersed." The Bhotbazar temple in Ghusrī to the N., quaint rather than beautiful, is an old Tibetan monastery, established by Warren Hastings in 1775, at the request of the Tashi Lama of Tibet.

The following places in the neighbourhood of Calcutta may be visited by the E.I. Railway. They can also be reached by car along the Grand Trunk Road :—

3 m. from Howrah stn., **Lillooah**. Here are the extensive carriage and wagon works of the E.I. Ry., employing about 13,000 men : and also the goods yards and locomotive sheds. An interesting example of an Indian railway settlement, with its English Church, Club and Institute, bowling-green and golf-links.

4 m. **Belur** and 6 m. **Bally**. The former is the home of the Ramakrishna Mission. The latter is one of the most orthodox and holy towns near Calcutta, in spite of its bone-mills and other industrial activities. It was to Bally that the Brahmans, who witnessed the execution of Nuncomar in 1774, ran to purify themselves in the river. There is a fine library at the adjoining hamlet of Uttarpara, founded and maintained by the Mookerjee family of Zamindars.

A quadruple track railway bridge across the river is being constructed at Bally.

11 m. **Rishra** ; the site of an old chintz factory. Rishra House, which is close to the Hastings Jute Mills, was owned by Warren Hastings from 1780 to 1784.

13 m. **Serampore station** (pop. 33,197), the headquarters of the subdivision of the same name, is on the W. bank of the Hooghly, opposite Barrackpore. Serampore was formerly a Danish settlement, and was then called Fredericksnagore. The mansion of the Danish Governor is now the Sub-divisional Officer's Court. In 1845 a treaty was made with the King of Denmark, by which all the Danish possessions in India—namely, Tranquebar, Fredericksnagore, and a small piece of ground at Balasore—were transferred to the E.I. Company for £125,000. The treaty confirmed the privileges conferred on Serampore College by the Royal Charter of the Danish King. The chief claim of Serampore to notice arises from its having been from 1800 onwards the scene of the labours of Carey, Marshman, and Ward. The zeal and success of the Baptist missionaries of Serampore form one of the brightest episodes of evangelistic efforts in India. From its press proceeded forty translations of the Scriptures. Serampore is now the centre of a flourishing jute and cotton trade, there being nine jute and two cotton mills in or near the town.

The old *Danish Church* (St Olaf's, 1805) cost Rs.18,500, of which Rs.1000 were given by the Marquis Wellesley ; it is now Anglican. In it are tablets in memory of the three missionaries. Their tombs are in the Baptist cemetery, on the right hand of the Grand Trunk road from the old railway station. There are also a

Baptist Mission Chapel, a Roman Catholic Church, and a Baptist Zenana Mission.

At Mahesh, some 2 m. from Serampore, there is a large and ancient temple dedicated to Jagannath. The car festival in July is the largest of its kind in India outside Puri.

The College, founded in 1818 by the Serampore missionaries, possesses a handsome building on the banks of the river, and commands a fine view across it over Barrackpore Park. The College has Faculties in Arts and Theology, and confers its own Divinity degrees. The Great Hall is 103 ft. long and 66 ft. broad. In it are portraits of Frederick VI. of Denmark (who gave the College its Charter, empowering it to grant degrees in all the sciences) and of his Queen; of Dr Marshman, by Zoffany, and of King Christian of Denmark and his Queen. The last portrait does *not* represent Madame Grand, who afterwards married Talleyrand. The portrait of Carey by Robert Home, which was here at one time, is now in the National Portrait Gallery in London.

The Library, of over 12,000 volumes, contains many treasures, including the first editions of Carey and Marshman's forty translations of the Bible; some curious Sanskrit, Tibetan and Pali manuscripts and a Persian manuscript containing the lives of the Apostles, prepared by Jerome Xavier for Akbar or Jahangir. There are many other books of unique interest, bearing on Oriental learning. Adjoining the Library is a museum in which may be found Carey's crutches, three chairs that once belonged to the famous Trio, a number of Carey's autograph letters and the marriage agreement between William Ward and Mary Fountain.

In the College compound is the house in which Carey lived and died. In 1910 a large and hand-

some hostel, with quarters for a member of the staff, was erected behind the historic College building. The Govt. Weaving Institute was established in the year 1909 for the purpose of training Indian weavers in modern methods of weaving.

The fine mansion next to the chapel, which was the common centre of the Serampore brotherhood, with all Carey's Park and botanic garden, is now the property of the India Jute Company. Here, from 1835 to 1875, the weekly *Friend of India* was edited, and also the *Samachar Darpan*, the first vernacular newspaper in Bengal.

14 m. from Calcutta, **Sheoraphull**, junction for a branch line (22 m.) to **Tarakeswar**. The ancient temple of Siva here is believed to be the richest in Bengal. It is frequented by numerous pilgrims in February for the Siva ratri festival, when a three days' fair is held, and also in April for the Chait Sankranti, or **hookswinging** festival. The hooks are suspended through the fleshy muscles on either side of the spine.

21 m. * **Chandernagore station**. Area, 3 sq. m.; pop. 25,423. The French settled here in 1673, and under Dupleix (1697-1764), of whom the place has a statue, over 2000 houses were built, and a considerable trade arose during his superintendship (1730-1741). In 1757 the town was bombarded by the British Fleet, under Admiral Watson, and captured, and the fortifications were demolished; but in 1763 the town was restored to the French. In 1794 it was again captured by the British, and held till 1815, when it was again restored to the French. The railway station is just outside the French boundary.¹ The prin-

¹ For the French possessions in India, see p. 658.

cial buildings are on the shady and attractive boulevard which skirts the river; these include the residence of the Administrateur, in which there is a bed that once belonged to Dupleix, a church built by Italian missionaries in 1726, and the Collège Dupleix, now a Higher English School. There are several hotels. At Goswami Ghat, between Chander-nagore and Chinsura, there still stands a huge ruined temple, known to the neighbourhood as the "Konē Bo-yēr Mandir." At present there is no image in the temple; but formerly it was the temple of the Goddess Kali. According to tradition, it was erected by one Devi Sarkar upon the wish of his brother's wife, who was the "Konē-Boū," or the youngest bride, of the Sarkar family.

The three rly. stns. of **Chinsura** (23 m.), **Hooghly** (24 m.), and **Bandel** junction (25 m.) are so close together that it will be found most convenient to alight at the last named. The town of **Hooghly** is 2 m. from Hooghly stn. With Chinsura it covers an area of 6 sq. m. The total population is 29,939. Hooghly was founded by the Portuguese in 1537 A.D., when the royal port of Bengal, *Salgaon*, began to be deserted owing to the silting-up of the Saraswati, on which river it was situated. They commenced by building a fortress at Golghat, close to the present Hooghly jail, some vestiges of which are still visible in the bed of the river. When Shah Jahan came to the throne complaints were made to him of the conduct of the Portuguese at Hooghly. The Emperor bore them a grudge, as they had refused to assist him against his father, and he sent a large force against the fort, which, after four and a half months' siege, in 1632, was stormed. More than 1000 Portuguese were slain, and 4000

men, women, and children were captured. Out of 300 Portuguese vessels only three escaped. The prisoners were sent to Agra, and forcibly converted to Islam. *Satgaon* was then abandoned for Hooghly, which was made the royal port. The Portuguese returned to Hooghly in 1633. It was also the first settlement of the English in Lower Bengal. The E.I. Company established a factory there in 1651, under a *farman* from Sultan Shuja', Governor of Bengal and second son of Shah Jahan. This *farman* was granted, according to tradition, to Dr Boughton, who had cured a favourite daughter of the Emperor, and asked for this reward. In 1669 the Company received permission to bring their ships to Hooghly to load, instead of transporting their goods in small vessels, and then shipping them into large. In 1686 a dispute took place between the English at Hooghly and the Nawab of Bengal, and the Company sent a force to protect their Hooghly factories. It chanced that a few English soldiers were attacked by the Nawab's men in the bazars, and a street fight ensued. Colonel Nicholson on this bombarded the town, and 500 houses were burnt, including the Company's warehouses, containing goods to the value of £300,000. The chief of the English factory was obliged to fly to Sutanati and hence arose the foundation of Calcutta in 1690.¹ In 1742 Hooghly was sacked by the Mahrattas.

The principal sight at Hooghly is the *Imambara*, built by Karamat Ali (Superintendent 1837-1876), the friend and companion of Arthur Conolly, at a cost of Rs. 300,000 from funds bequeathed by Muhammad Muhsin, who owned a quarter of the great Saiyidpur estate, in Jessore district, and died in 1814, without heirs, leav-

¹ See p. 105

ing a property worth £4500 a year for pious purposes. The trustees quarrelled, and Government assumed charge of the estate. During the litigation a fund of £86,110 had accumulated, and with this the Hooghly College was founded in 1836. The façade of the Imambara is 277 ft. by 36 ft.; and in its centre is a gateway flanked by two minarets, or towers, 114 ft. high. On either side of the door are inscriptions. Within is a quadrangle, 150 ft. by 80 ft., with rooms all round, and a fine hall paved with marble, having a pulpit with sides covered with plates of silver, and a verse of the Koran inscribed in each plate. The library was bequeathed by Karamat Ali, but a few books have since been added by other people. Among them are 787 MSS., including a fine folio Koran, in two volumes, given by Prince Ghulam Muhammad, son of Tipu Sultan. On the opposite side of the road from this Imambara is the old Imambara, built in 1776-77. In the W. corner lie the remains of Karamat Ali, and there is a white marble tablet placed against the wall, with an extract from the Koran, but no tomb.

Chinsura, 1 m. S. of Hooghly, was held by the Dutch for 180 years, and ceded by them to the British in exchange for Sumatra in 1825. It is the administrative headquarters of Hooghly Dt. The old octagonal *Dutch Church* is said to have been built by the Governor in 1678. In it are fourteen escutcheons, dating from 1685 to 1770, with inscriptions in Dutch. The *Hooghly College* is to the S. of the church. There are 260 students. It was established, as a tablet in the hall testifies, "through the munificence of the late Muhammad Muhsin" in 1836. The house, according to local tradition, was built by General Perron, who lived at Chinsura for a year after his surrender to Lake

in 1803 (p. 435): it is a fine specimen of the Anglo-Indian domestic architecture of the period. Chinsura was at one time an important Cantonment and the barracks and officers' quarters are used as residences and offices. The cemetery is 1 m. to the W. of the church; it is well kept, and contains many old tombs of former Dutch officials.

Between Chinsura and Chander-nagore is **Biderra**, where the British, under Colonel Forde, obtained a decisive victory over the Dutch on 25th November 1759. It is said that the British Commander was aware that his nation and the Dutch were at peace, and wrote to Clive for an Order in Council to fight. Clive was playing cards, and wrote in pencil: "DEAR FORDE,—Fight them immediately, and I will send you an Order in Council to-morrow. —Thursday, 17th, 1.30 P.M."

Bandel, 1 m. N. of Hooghly. Junction of the E.I. Ry. and the E.B. Ry. The linking line, 3 m. long, crosses the river to Naihati (Route 24) by the great cantilever Jubilee bridge, 1213 ft. long (opened in 1887 by Lord Dufferin), which ranks as one of the greatest engineering feats in India. A Portuguese monastery and church were built at Bandel in 1599, and the keystone with the date was erected in the new one, which is of brick, and very solidly built. It is dedicated to Our Lady of the Rosary. There are fine cloisters on the S., and a priory, in which is a noble room called St Augustine's Hall. The church was founded by Augustinian friars, demolished by Shah Jahan in 1640, and rebuilt by John Gomez de Soto. Bandel is famous for its cream cheese.

About 6 m. above Hooghly is **Satgaon**, where there is a ruined mosque, which, together with a

few tombs near it, is the only remnant of the old capital of Lower Bengal. It was built by Saiyad Jamal - ud - din, son of Fakhr-ud-din, who, according to inscriptions in the mosque, came from Amel, a town on the Caspian. The river of Satgaon, up to Akbar's time, formed the N. frontier of Orissa, and Satgaon flourished for 1500 years. Three centuries ago the Hooghly flowed by the town.

Down the Hooghly River from Calcutta to Sagar Island.

The Bengal Pilot Service was inaugurated in 1667, when the pinnace *Diligence* of 60 tons with a crew was sent out by the East India Company. The Calcutta pilots, who number above fifty, and are responsible for the safety of some 2322 vessels, with a tonnage of 11½ million tons up and down the river, occupy a higher position than any of their profession. Pilotage receipts amount annually to more than a crore of rupees. The Hooghly is a most dangerous and difficult river to navigate, as, apart from the chance of cyclones, which take place in any month except February, there is the normal danger of shoals and tides, which is a very real and a very great one. New shoals are continually forming, and nothing but a daily experience of the river can enable a pilot to take a vessel up or down safely. The most dangerous shoal—called the "James and Mary" or Mukraputty—is 30 m. S. of Calcutta, just above the Rupnarain; but from the Damodar River to Hooghly Point, a distance of 6 m., the whole river is difficult. The s.s. *Sanctoria* foundered on the James and Mary Sand in 1919; but the systematic dredging which has been carried out since the purchase of three large dredgers has, of recent years, effected a marked improvement. The name

of the shoal dates from the wreck of a vessel called the *Royal James and Mary* on that bank in 1694. It appears first under this name in a chart dated 1711. The Hooghly used not to be navigated at night, nor until the tide made could it be ascended. The river has since 1915 been lighted in the Lower Reaches, that is, from Mud Point downwards, for a distance of 65 m.: vessels do not now usually anchor at Sagar Island, but, according to draft, can come up regardless of the state of the tide. The ordinary fall and rise of the tide is 11 ft. 8½ in. at Calcutta. A special feature of the rising tide is the bore, which hardly ever attains a height of 7 ft.; 6 ft. are regarded as the maximum, and that only as far as Chinsura. The bore reaches as far up the river as 5 m. above Nadia; it very seldom does damage.

The view of the river, with ships at anchor along the Strand and down to Garden Reach, is very striking; the Maidan, the Esplanade, the Fort and the imposing buildings along Chowringhi present a most impressive picture. From between Garden Reach and the Botanical Gardens the vista to the N. is especially fine when the atmosphere is clear. From here the Victoria Memorial is seen straight ahead, a beautiful view.

Seven m. from Calcutta the last sight of the premier city of India is lost; 5 m. farther **Budge Budge** (Baj Baj; railway to Calcutta, 17 m.) is passed on the left with its petroleum depots; at a similar distance farther on **Ulubaria**, a small town, is passed on the right bank. Here the main road from Calcutta to the temple of Jagannath at Puri crosses the Hooghly, and here begins the Midnapore High-Level Canal. The river, which has hitherto followed a S.W. course, now turns due S. to Hooghly Point.

At 27 m., a little above the mouth of the Damodar, is (on the left bank) **Falta**, the site of an old Dutch factory, and the place to which the British retreated on the capture of Calcutta by Suraj-ud-daula in 1756, and from which Clive advanced to the recapture of Calcutta.

The Damodar is navigable as far as Amta, which is 25 m. from its mouth, by boats of from 10 to 20 tons, and large quantities of coal are brought down from the Raniganj mines.

5 m. below Falta the Rupnarain River enters the Hooghly from the right bank nearly opposite Hooghly Point, and from here the river turns S.E. to Diamond Harbour, and then S. again.

At 12 m. up the Rupnarain river, on the right bank, is **Tamluk**, a very famous city in ancient times, and a maritime port of the Buddhists, where the Chinese pilgrim Fa Hian embarked for Ceylon in the beginning of the 5th century A.D. Hiuen Tsang 220 years later speaks of it as an important Buddhist harbour. It is now a long way from the ocean, but reached by the tide. There is a *Temple* here known in the locality by the name of Barga Bhima or Bhenna, which was originally a Buddhist temple. The shrine is surrounded by a curious triple wall. Motor services from Tamluk to Panchkura (R.H.), Maisadal and Naraghat.

At 48 m. from Calcutta is **Diamond Harbour** (left)—30 m. by a metalled road—marked by a large number of trees, where the E.I. Company's ships used to anchor. There is a Custom House here, and the officers board ships proceeding up the river. There is also a railway to Calcutta (37 m.), with frequent trains.

At 56 m. (left) is the town of **Kalpi** (Culpee), which contains a

large market-place for the sale of rice grown in the interior, and from which there is a road to Calcutta. Here the estuary of the Hooghly begins, and at 99 m., between Kedgerie and Sagar Island, it is 15 m. broad. At this island, where the Ganges is considered to join the sea, a gathering of from 50,000 to 60,000 pilgrims from all parts of India, but principally from the Bengal districts, takes place in the early part of January, the date of the great Bathing Festival of Bengal. The bathing ceremony, as a rule, lasts for three days, though the fair lasts for a couple of days longer. The island was overwhelmed by a cyclone in 1864, when only 1500 out of 5600 inhabitants escaped alive.

Sport is abundant. Deer, wild boar, and a great variety of sea-birds are found throughout the year. Tigers are to be met with in the jungle; but tiger-shooting, as practised here, is very dangerous, and should not be attempted by inexperienced persons.

The sea is reached at 82 m., where there is a lighthouse of iron, 76 ft. high, commenced in 1808, on Middleton Point, at the S.W. end of Sagar Island.

A pleasant trip by river is by the Cachar-Sunderbans Service from Armenian Ghat, Calcutta, down the Hooghly and round through the Sunderbans to Khulna; return by rail to Calcutta (Sealdah Stn.).

A longer journey of four to five days is by the Assam-Sunderbans Despatch Service from Juggernathghat (above Howrah Bridge) to Goalundo: 1st class, Rs.30, servants, Rs.5; messing Rs.6 per day. Return by rail to Calcutta: 1st class, Rs.23-15-9. Twenty-four hours' notice should be given by intending passengers, who should embark on the evening previous to sailing.

From Goalundo the journey can be continued by steamer up the Brahmaputra to various places in the Assam Valley (Route 24).

ROUTE 7.

BHUSAWAL to CALCUTTA (HOWRAH) by Akola, Wardha (for Warora and Chanda), Nagpur, Kampti, Raipur, Bilaspur, and Sini, and from Sini to (a) Purulia and Asansol, and (b) Ranchi and Kharagpur.

This route from Bombay to Calcutta is 1223 m., or about 130 m. shorter than any other. Fares Rs.133-7-6, Rs.66-12-6, Rs.28-7-6 (by mail). Time, 41½ hrs. from Bombay. The route provides an outlet for the great wheat and seed-producing district of *Chattisgarh* (the thirty-six forts), one of "the granaries of India." The scenery in parts of the line, notably at *Darekasa* (p. 142), *Dongargarh* (p. 142), and *Saranda* (p. 144), is very fine.

The Route from Bombay to

276 m. from Bombay, **Bhusawal junction** (R.) is described in Route 2.

Soon after leaving Bhusawal the traveller enters the districts of Berar (pop. 3,075,316, area 17,000 sq. m.), which continue almost all the way to Nagpur. They were assigned by the Nizam to the British by a treaty in 1853, for the support of the Hyderabad Contingent Force. This treaty was remodelled in December 1860, by which, in recognition of the Nizam's services in the Mutiny of 1857¹, his debt of 50 lakhs was cancelled, the districts of Dharaseo (now known as Osmanabad) and the Raichur Doab were restored, and the Hindu State of Shorapur (administered by Meadows Taylor from 1841 to 1853) was ceded to him. By the arrangement of December 1902, made by Lord Curzon with the late Nizam,

¹ The Nizam, Nasir-ud-daula, died in May 1857; but his successor, Afzal-ud-daula, carried on his policy.

involving a fixed payment of 25 lakhs yearly to the Hyderabad State, the permanent administration of the Berar districts by the British Government has been secured, and they have been added to the Government of the Central Provinces; while the Hyderabad Contingent Force has been incorporated in the Indian Army. In March 1926 the Viceroy (Lord Reading) and the Secretary of State (Lord Birkenhead) decided against the reopening of the settlement of 1902.

The fertility of the Berar districts, which form one of the richest and most extensive cotton-fields in India, is very striking. The soil is black loam overlying basalt. At harvest-time the whole surface is one immense waving sheet of crops. The districts of Berar are Akola, Amraoti, Buldana, and Yeotmal.

308 m. **Malkapur**. Motors available to Jalna (Hyderabad State Ry.) *via* Buldana (D.B.) hqrs. of Buldana Dt., 28 m. S. from Malkapur. Buldana is 2300 ft. above sea-level and noted for its good climate—"the coolest and most pleasant station in Berar."

333 m. **Jalamb junction station** (D.B.)

Branch 8 m. S. to **Khamgaon** (D.B.) station, where there is an important cotton mart. About 30 m. S. from Khamgaon is the town *Mehkar*, and 15 m. S. of *Mehkar* is a curious soda lake called *Lonar*, formed in the crater of an extinct volcano. The salt is used for washing and dyeing purposes, and is exported in considerable quantities.

363 m. from Bombay, **Akola** (D.B.) station is the headquarters of the district of that name, and one of the principal centres of the cotton trade in Berar.

A road from Akola runs S. to Basim, and thence (80 m.) to Hingoli (p. 86) in Hyderabad.

Another runs N. to Akot (28 m.), whence Narnala Fort is about 15 m.—the last 5 m. impassable for motors. Another fort at Balapur, 15 m. W. of Akola. Motors available. Balapur was the headquarters of the Imperial Army in the Deccan in the time of Akbar.

386 m. **Murtazapur**. Central Provinces Railway, 48 m. N. to Ellichpur; and 70 m. S.E. to Yeotmal (hdqrs. of district of that name). Ellichpur was regarded as the administrative capital of Berar until 1853. The deserted Cantonment here was garrisoned by the Hyderabad Contingent until 1903. There is a fine group of Jain temples at Muktagiri, 7 or 8 m. N. of Ellichpur.

413 m. **Badnera** junction station (waiting-room, D.B., and spinning and weaving mill).

Branch 6 m. N. to **Amraoti** station (waiting-room, D.B. near railway station). Amraoti is the headquarters of the Commissioner of the Berar Division. There is a cotton market here.

An object of interest is the hill fort of **Gawilgarh**, a stronghold of the Raja of Berar, which was taken by Colonel Arthur Wellesley on 15th December 1803 in the Second Mahratta War. It is situated S.E. of

Chikalda, which is a small sanatorium, dating from 1839, on a plateau in the Satpura hills, about 3664 ft. above sea-level, 5 m. long by $\frac{3}{4}$ m. broad. It is visited during the hot season chiefly by a few officers from the neighbouring headquarters of Nagpur and Amraoti; the bungalow accommodation is very limited, and the place presents few attractions for non-official visitors, although the scenery is beautiful. Motors are available from Amraoti (62 m.) and from Ellichpur Road station (30 m.).

453 m. **Pulgaon**. Light ry. to Arvi, 22 m.

471 m. from Bombay and 49 m. from Nagpur, **Wardha** (R.), chief town of the Western District of the Central Provinces, is the junction for the broad-gauge line to *Warora*, and the Balharshah Colliery in the Chanda District. The town is favourably situated for trade, and is steadily increasing in importance as a considerable cotton mart. There are a D.B., a Sarai, a Town Hall, High School, Church, Circuit House, and a fine Govt. Hospital; also a Medical Mission of the Free Church of Scotland. The only building worth notice in the heart of the town is the late Rao Bahadur Bachraj's temple of Lakshminarayan, which is richly carved and decorated.

Hinganghat, a station on the Wardha Balharshah branch, 21 m. from Wardha, is a very old and important cotton market. Waiting-room at the station and a traveller's bungalow close by. There are two cotton-spinning and weaving mills in the town, besides a few cotton ginning and pressing factories.

45 m. **Warora** station, a town in the Chanda District of the Central Provinces, and a considerable cotton mart.

74 m. **Chanda**, the headquarters of the Chanda District (D.B.), and a most attractive spot. It is becoming an important centre for coal mining. The town is surrounded by a continuous wall of cut stone $5\frac{1}{2}$ m. in circuit. Inside the walls are detached villages and cultivated fields. The foliage is beautiful, and there are extensive forest preserves in the neighbourhood. The tombs of the Gond kings, and the temples of Achaleswar, Maha Kali, and Murlidhar, are all worth

a visit. At *Lalpet*, in the town, a large space is covered with monolith figures of gigantic size, which appear to have been prepared for some great temple never erected. Chanda Fort is also connected with the main line at Nagpur by a light ry., Chanda Fort-Itwari (Nagpur), 135 m., through Nagbhir.

83 m. from Wardha, **Balharshah**. A broad gauge line (opened for traffic in Nov. 1928) runs from Balharshah to Kazipet (p. 570) in the Nizam's Dominions, providing a new direct route (shorter by 200 m. than the route *via* Manmad) from Madras (p. 614) to Delhi.

520 m. from Bombay on the main G.I.P. Ry. line is **Nagpur**,* the capital of the Central Provinces, which have an area of 100,000 sq. m. and a population of 15.9 millions (inclusive of Berar and the feudatory States). The Governor (1929) is H.E. Sir Montagu Butler, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., who was appointed in 1925.

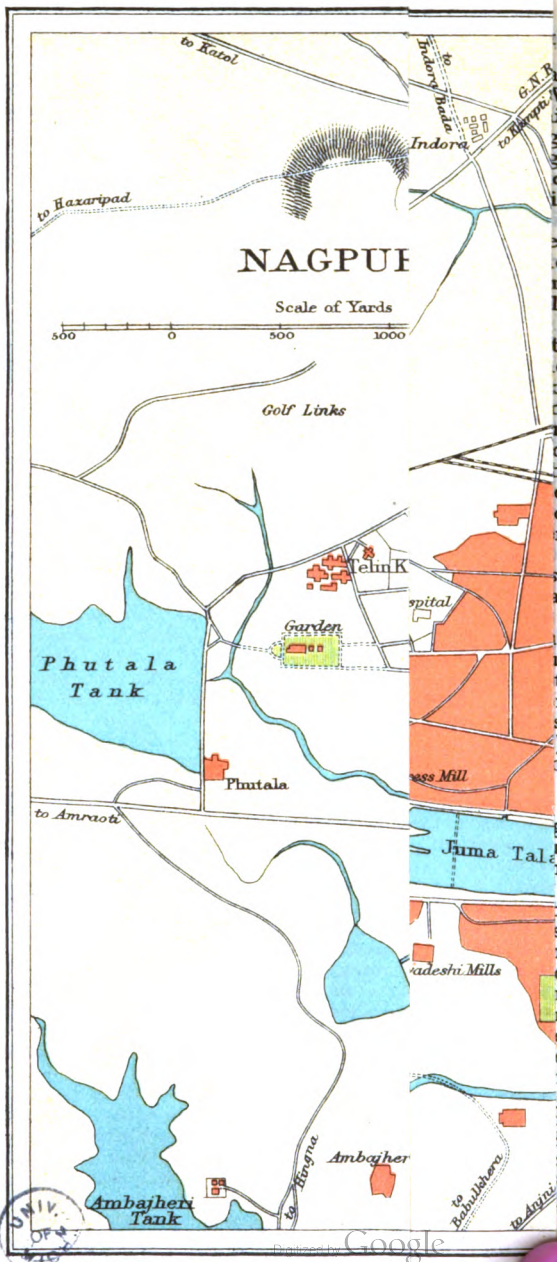
The District of Nagpur itself has an area of 3840 sq. m. Among the inhabitants are 46,241 aborigines known as Gonds. Of these the hill-tribes have black skins, flat noses, and thick lips. A cloth round the waist is their chief garment. The religious belief varies from village to village. Nearly all worship the cholera and the small-pox, and there are traces of serpent-worship.

The ancient history of the Provinces is very obscure. In the 5th century A.D. a race of foreigners, *Yavanas*, ruled from the Satpura plateau, and between the 10th and 13th centuries Rajputs of the Lunar race governed the country round Jubbulpore, while the Pramars of Malwa ruled territory South of the Satpuras. The Chanda dynasty of Gonds reigned probably as early as the 10th or 11th century, and the Haihayas of Chattisgarh were of more

ancient date. In 1398 there were Princes reigning at Kherla, on the Satpura plateau, of whom Ferishta says: "They possessed all the hills of Gondwana." In 1467 they were conquered by the Bahmani kings. The Gonds again rose to power in the next century; but in 1741 the Mahratta Bhonslas invaded the country. At Sitabaldi, on the 26th and 27th of November 1817, the Mahratta troops of the Bhonsla Raja, Appa Sahib, attacked the resident, Mr (afterwards Sir Richard) Jenkins, and the few troops he had been able to assemble. After a desperate engagement, during which the Mahrattas for a time got possession of one of the two eminences of the Sitabaldi hill, the British were at length victorious, the fortunes of the day being turned by the brilliant charge of a small body of Bombay cavalry under Captain Fitzgerald. But the disbandment of the Bhonsla's army was only obtained after a second battle, in which the Mahrattas were completely routed. Appa Sahib escaped, and died in exile. A child was raised to the throne under the title of Raghoji III., and on his death, in 1853 without issue of collateral heirs, the country was annexed by the British. In 1861 it was, with the Saugor and Nerbada territories (which had been taken over in 1818) formed into the Central Provinces by Lord Canning..

On the 13th of June 1857 the cavalry of the Nagpur Irregular Force conspired with the Muhammadans of the city to rise against the British, but the Madras infantry and artillery remained loyal, and the outbreak was suppressed, chiefly by the resource and energy of Mr R. S. Ellis, the Deputy Commissioner. In anticipation of the possibility of further trouble Sitabaldi Fort was provisioned to stand a siege, but fortunately the emergency did not arise.

Nagpur (pop. 145,193) is



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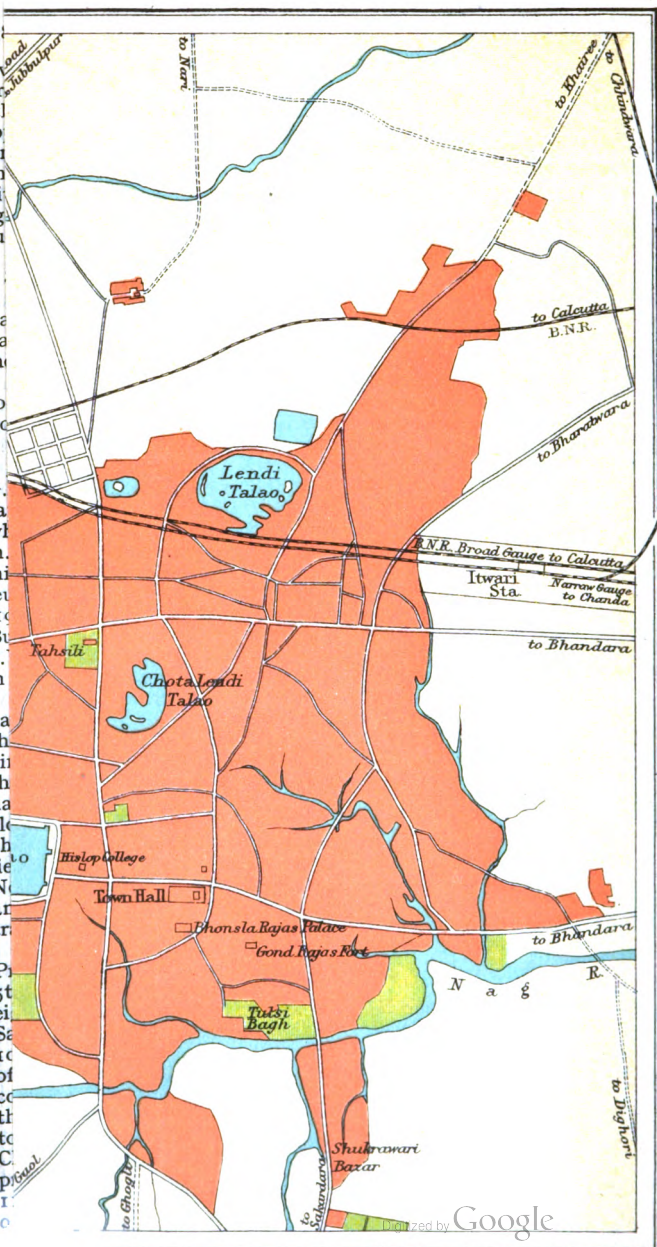
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bounded on the S. by the river Nag, from which it takes its name. The municipality includes, besides the city, the suburb and civil station of *Sitabaldi*. In the centre, W. of the railway station, is *Sitabaldi* hill, crowned by a fort (built in 1818, and possessing many antique specimens of arms), which commands a fine view, and is a landmark for miles round. W. of *Sitabaldi* hill is the civil station, in which are the new Secretariat, a fine building in modified Renaissance style; the Courts; the Victoria Memorial Technical Institute; the new Central Provinces' Club-house; the English Church which has been enlarged into a handsome Cathedral; a large Roman Catholic Cathedral and school; an important branch of the Missions of the Free Church of Scotland; two hospitals for men and women; and a fine Mahratta church. Beyond, to the N., are the Police Lines and the Sadr Bazar, and the suburb of *Takli*, once the headquarters of the Nagpur Irregular Force. There is a fine new Government House on *Takli* hill; in the hot weather the residence of the Governor is at *Pachmarhi* (p. 46).

Sitabaldi is the name given to the suburb S. of the hill of that name. Below the glacis is the railway station; beyond, to the E., is the *Jumà Talao*, a large tank; and still farther E. is the city, hidden in foliage. Three great roads lead from the civil station through the city—one on the N. and one on the S. bank of the tank; the third, and most Northerly of the three, crosses the railway by a bridge to the N. of the station. Besides the *Jumà Talao*, there are two other fine tanks, the *Ambajheri* and *Telinkheri*, 4 m. and 3 m. respectively W. of the city. The former of these, built by the *Bhonslas* over a century ago, was in 1873 brought into use as a reservoir. The city's water supply has since been very greatly increased by the opening,

in 1911, of the large *Gorewara* reservoir, about 4 m. to the N.W. of the civil station. The chief gardens are the *Maharaj Bagh*, near *Sitabaldi*, the *Tulsi Bagh*, inside the city, and the *Paldi*, *Shakardara*, *Sonagaon*, and *Telinkheri* in the suburbs.

Nagpur is famous for its delicious oranges, quantities of which are exported. There are several large cotton-mills. There is also a museum.

The *Bhonsla Palace*, in the city, built of black basalt, was burned down in 1864, and only the *Nakkar Khana*, or Hall of Music, remains. Near it are the *Hislop College* and the *Town Hall*. The *Morris College* was also formerly in this neighbourhood, but has been removed to the old Residency building, at the foot of the Western slope of *Sitabaldi* hill.

The *Cenotaphs of the Bhonsla Rajas* are in the *Shukrawari* quarter, to the S. of the city.

The Great Indian Peninsula Railway terminates at Nagpur, and from this point E. to *Calcutta* (703 m.) the line belongs to the *Bengal Nagpur Railway*. Light rlys., 89 m. N. to *Chhindwara* (p. 141); and 135 m. S. to *Chanda Fort*, on the G.I.P. line to *Itarsi* (p. 45).

529 m. **Kampti** (D.B.), a large town and military Cantonment (pop. 20,226), on the right bank of the *Kanhan* river, which is spanned by a handsome stone bridge that cost £90,000. Close to it is the railway bridge—a fine iron structure that cost £100,000. A British infantry battalion and an Indian infantry regiment are stationed here. *Kampti* dates only from the establishment of the military station in 1821. The English church was built in 1833, and there is a Roman Catholic establishment of the Order of *St Francis de Sales*, with a church and convent. There are five mosques and a number of Hindu temples.

Beyond Kampti, and 25 m. N.E. of Nagpur, from which it is easily accessible by a branch of the B.N. Railway, is the Tahsil town of **Ramtek** (pop. 8580). The town runs in a straggling line along the foot of a fine, well-wooded hill sacred to Rama, from whom it takes its name. The hill is crowned by a citadel with a double line of defences, and within the citadel, at the Western end of the summit, stands a group of temples, which are the object of pilgrimages from all parts of India. The inner line of defences was built by Raghoji I., the first Bhonsla ruler of Nagpur, but the citadel itself is much older, and the temples are shown by inscriptions to be at least 600 years old. The principal temples are those of Rama, and Sita, his wife. They are in a fine state of preservation, and their white roofs can be seen for a great distance. Below the Eastern end of the hill, in a picturesque valley, lies the village of Ambala, with a small tank surrounded by temples, erected by individual devotees. From Ambala a flight of steps rises to the summit of Ramtek Hill, and it is by this route that the pilgrims ascend.

559 m. **Bhandara Road** station (D.B. near) is about 7 m. from Bhandara, the district headquarters, which is close to the Wainganga river. Pop. 13,468. There are a D.B. and a Club. In the town there is a shop (Tyeb Ali's) where oilman's stores (not in great variety) can be obtained. Bhandara is on the main road from Nagpur to Raipur. A branch road runs to the railway station; motors available, 12 annas per seat.

601 m. **Gondia junction**. A line runs from here N. *via* Balaghat to Nainpur, 74 m., and Jubbulpore (p. 46), 70 m. farther. A loop-line also runs S. to Naghbir, in Chanda District, whence one branch goes to Nagpur and an-

other to Chanda. There is a good D.B. not far from the railway station, and waiting- and refreshment-rooms at the station itself, where good stores can be bought. From Gondia a road runs S. to Arjuni, where it joins the Great Eastern Road from Nagpur to Raipur, and the Districts beyond. The forests in the neighbourhood of Arjuni (D.B.) offer attractions to the sportsman.

Nainpur is the station through which the Mandla District is entered. This District has an area of 5089 sq. m.; pop. 386,446. The narrow-gauge Jubbulpore-Gondia branch of the Bengal-Nagpur Railway passes through two stations, Nainpur (D.B. good) and Pindrai, within its boundaries. From Nainpur a branch line (27 m., opened in 1909) runs N.E. through Jamgaon, Chiraidongri and Bamhni-Banjar stations to Mandla town (D.B.), the headquarters of the district. The railway station is on the opposite side of the river Narbada to the town; it is, however, included in municipal limits (Mandla Municipality; pop. 8784).

From an archæological point of view **Mandla** is of some interest as the capital of the Garha-Mandla Rajas. The dynasty was of Dravidian, not of Aryan, origin, and at one time was predominant in Central India. Driven from the rich plains of Jubbulpore and Saugor, however, the Rajas re-established themselves first at Ramnagar, a riverside village 10 m. from Mandla, and afterwards at Mandla. Hirde Shah, who reigned in the middle of the 17th century, built himself a lordly palace at Ramnagar. Its ruins possess some interest, but the palace has no architectural beauty. It is a massive three-storied pile, built for strength alone, and commands a magnificent view of the river Narbada,

which flows at its foot. Mandla fort was built a few years later by a succeeding Raja; on three sides it is surrounded by the Narbada, and on the fourth by a deep ditch. A lofty wall, studded with bastions, once encircled it, but Mandla masons have robbed the old battlements piecemeal of their stones, and the site of the fort is now a luxuriant tropical jungle. The foundations of the wall, however, are still visible, and a few of the larger towers have survived.

The District is rich in forests, which teem with game. Tiger, panther, bison, sambhar, barasingha, and chital are only a few of the varieties that may be found. Means of transport and communication, however, are very difficult. Carts are practically useless, and heavy luggage must be carried either by camels or pack-bullocks. The easiest means of approaching the Eastern parts of the District is by train to Birsinghpur, on the Bilaspur-Katni extension of the Bengal-Nagpur Railway, and thence by an indifferent road, 42 m. in length, to Dindori, the headquarters of the Eastern Tahsil.

The river Narbada, which rises a mile or two outside the Eastern border of the District, forms in the neighbourhood of Mandla a ten-mile reach, nearly half a mile broad and of considerable depth. Its banks are studded with temples and ghats, for the water hereabout is of peculiar sanctity, and bathing in the sacred stream is popularly supposed to wash away all sins. The only temple of antiquarian interest is at Kukarramath, built by Jains about the 10th century. It is situated 9 m. from Dindori and 60 m. from Mandla. Local gossip has woven a curious tissue of legend round its origin, but the commonest superstition is that a cobra with red eyes circles the neck of the image every night and spreads his hood over Mahadeo's head.

From Nainpur, in the Mandla District, there is also a line (narrow gauge) W. to Chhindwara *via* Seoni, a distance of 88 m. (Seoni is a District well provided with principal roads and D.B. and Inspection Bungalows. By this line Chhindwara is 157 m. from Jubbulpore and 161 m. from Gondia. Chhindwara is also 78 m. by road, or 92 m. by the narrow-gauge ry., N. of Nagpur. This railway continues to the Chhindwara coalfield at Khirsadoh (branch to Parasia) and Barkuhi—a triumph of engineering.

The G.I.P. Ry. broad-gauge line from Nagpur to Itarsi, passes through the S.W. corner of the Chhindwara District. A branch runs from Amla, in the Betul District, to Parasia, through the Chhindwara coalfield. PENCH (2700 ft.) (D.B.) is $1\frac{1}{2}$ m. from Parasia.

Five metalled roads radiate from Chhindwara to (1) Nagpur, (2) Seoni, (3) Narsinghpur, (4) Matkuli on the Piparia-Pachmarhi Road, and (5) Multai on the Nagpur-Betul-Itarsi Rd. Petrol available at Parasia, 17 m. N. on the Matkuli Road. There are several D.B.'s. Chhindwara Dt. has some variety of wild animals, but is not a good district for shikar. The climate is cool.

Deogarh, 10 m. W. from the Nagpur road and ry. at Umra Nala (on the Nagpur line) has a small fort, which was the headquarters of the Gond Raja, Bakht Buland. The buildings cover the hill for $\frac{1}{2}$ m. The Chhindwara coalfield is the most important in the Central Provinces. Chicoli at mile 41 of the Nagpur-Betul road, has a banyan tree covering about 2 acres. The D.B. at Tamia, 35 m. N. on the Matkuli Rd. has a fine view of the Pachmarhi hills. An hour's run by motor E. of Tamia along the Chindi Road brings one within a short walk of the edge of the Patakot. This is a wild valley,

1500 ft. deep and 3 m. wide, with numerous precipices.

14 m. from Gondia on the main route from Bhusawal to Calcutta is

615 m. **Amgaon station (R.)**.

From 624 m. **Salekasa** and 631 m. **Darekasa** to

647 m. from Bombay, **Dongargarh station (R. and H.)** the line passes through hills and heavy bamboo jungles, and through a pass with a tunnel at the summit. Dongargarh is an engine-changing station, with a considerable European population connected with the railway. There is a guest-house in the town. The ruins of a fort are on the N.E. face of a detached hill, some 4 m. in circuit. Inside the fortification there are tanks for water supply, but no buildings.

At Amgaon, 95 m. E. of Nagpur, the **Chattisgarh** country is entered and continues to Raigarh station, at 338 m. The people of this country still consider themselves a separate nationality, and always call themselves *Chattisgarhias*. Except in the hilly portion, the population is almost pure Hindu. The Rajas of Ratanpur ruled originally over their thirty-six forts, each the chief place of a District; but about 750 A.D. the kingdom was divided into two, and a separate Raja ruled in Raipur. Kalyan Sahi, who ruled between 1536 and 1573, made his submission to Akbar at Delhi, and this prudent conduct resulted in the Haihaya rulers retaining their country until the Mahratta invasion in 1740.

The tract is in the shape of a vast amphitheatre opening to the S. on the plains of Raipur, but on every other side surrounded by tiers of hills. It has developed into a great grain-producing country. There is considerable

forest land, where excellent shooting can be had.

708 m. from Bombay, **Raipur station (pop. 38,341)**. Light ry. to Abhanpur Jn. and Dhamtari (46 m.) The chief town of a District of the same name, and the headquarters of the Commissioner of *Chattisgarh*, who is also Political Agent, C.P. Feudatory States. The town is surrounded by tanks and groves of trees, which form its attraction. The town had a *Fort*, built by Raja Bhubaneswar Singh in 1460. No trace now remains except isolated mounds. The *Burha Tank*, on the S., the same age as the Fort, covered nearly 1 sq. m.; but in later improvements it has been reduced in extent. The public gardens are on its E. shore. The *Maharaj-bandh Tank* was constructed by a revenue farmer in the times of the Mahrattas, and close to it is the temple of Ramchandra (locally known as the Dudha-dhari temple), built in 1775 by Bhimbaji Bhonsla. There are several other reservoirs in the suburbs; and in the centre of the town is the *Kankali Tank*, constructed of stone throughout, at the close of the 17th century. About 2 m. to the S. are the fine buildings and grounds of the Rajkumar College, for the education of the sons and relatives of notables of Bihar and Orissa and the C.P.

From Raipur a broad-gauge ry. is under construction, 241 m., to Vizianagram (p. 517).

777 m. **Bilaspur junction station (R.)** Some big game in the forests in the N. and Central parts of Bilaspur District. Motor supplies available at Bilaspur.

Branch N.W. through a mountainous District and the coalfields of *Umaria* to 198 m. **Katni junction**, on the E.I. Railway (p. 48). This branch passes at *Pendra Road sta-*

tion under the **Amarkantak** plateau (3500 ft.), where the **Narbada** has its source. There are several temples and a "Kund" or reservoir enclosing the head spring. The plateau is frequented by the "tirth basis" and other pilgrims. The scenery between **Khodri**, S. of **Pendra**, and **Khong-sara** is of exceptional beauty.

About 15 m. N.E. of **Bilaspur** is the precipitous *hill of Dalha*, 2600 ft. high, rising sheer out of the plain, and affording a grand view.

15 m. N. of **Bilaspur** is **Ratanpur**, the old capital of the formerly self-contained kingdom of *Chattisgarh, or the Thirty-six Forts*, in which are now included the Districts of **Raipur**, **Drug**, and **Bilaspur**. The town lies in a hollow surrounded by hills. It ceased to be the capital in 1818, but the crumbling arches of the old fort, the broken walls of the ancient palace, and the half-filled-up moat which surrounded the city, recall its former condition. The population is under 6000. The **Brahmans** of **Ratanpur** are still the leaders of their class all over **Chattisgarh**. The numerous small temples in the vicinity are scattered over an area of 15 sq. m. A temple at **Pali**, 13 m. N.E. of **Ratanpur** is protected under the Ancient Monuments Act. There is at **Ratanpur** a large number of fine mango groves, with numerous tanks and temples scattered amidst their shade. Great blocks of masonry of uniform shape commemorate distinguished sats (*suttees*). The most prominent of these is near the old fort, where a large building records that there in the middle of the 17th century twenty ranis of **Raja Lakshman Sahi** devoutly fulfilled the duty of self-immolation. **Kargi Road** station, on the **Katni** branch, is a few miles from **Ratanpur**.

802 m. **Nalla** Stn. At **Janjgir**, 1½ m. S., is a protected temple.

Before reaching

809 m. **Champa** station the **Hasdo** river is crossed. The stream cuts the coalfields of **Korba** some 20 m. N. of the railway.

The line continues E. through a thinly-inhabited flat country to

858 m. **Balgarh**.

890 m. **Belpahar** station, on leaving which the **Ib** river, which flows S. into the **Mahanadi** river, is crossed by a considerable bridge. The scenery at the crossing is very fine.

898 m. **Ib** station is situated on the E. bank of the **Ib** river. Before crossing the **Ib** river, there is a siding for trains to the **Rampur** colliery in village **Lamptibahal**, about 2 m. from **Ib** station.

903 m. **Jharsuguda** junction station. There is a P.W.D. Inspection Bungalow, which could be available to travellers if not previously occupied by local officers.

Branch for the civil station of **Sambalpur** (D.B. and Circuit House, available for travellers), distant 31 m. Near here, at different times, diamonds of considerable value have been procured. They are said to be found in the bed of the **Mahanadi** upstream from the town, but whether the source of supply is the **Mahanadi** or the **Ib** river is perhaps not clearly known.

From **Jharsuguda** the railway takes a N.E. course, and continuing through a well-inhabited plain country to

909 m. **Dhutra**, and at

916 m. **Bagdehi** station, it enters the hills, in which it continues until the plains of **Bengal** are reached.

936 m. **Garpos** station. Hereabouts the forests are very dense,

and in the rainy season they are largely resorted to by wild elephants. Between this and

958 m. **Kalunga** station the Brahmani river is crossed. The local people used to earn a very fair living by washing the river-sands for gold; but they now prefer to work in the limestone quarries and manganese mines of the Gangpur State. The view upstream is very grand when the river is in flood.

991 m. **Manharpur** station. Here the railway enters the **Saranda** forests, which contain some of the finest sal trees (*Shorea robusta*) in India. The line winds round hills, passing close under them on both sides. The summit of the range is reached through a heavy cutting leading into a tunnel. Traffic in ironstone, limestone, timber and sabai grass for paper manufacture has expanded. The inhabitants of these wilds are nearly all aboriginal Hos or Mundas. A light ry. runs from Manharpur to the vast iron-ore deposits of Saranda, which are mined by the Bengal Iron Company.

1029 m. **Chakradharpur** station. This is a large railway settlement and engine-changing station. The town is also increasing in size and importance, as it is a centre for the timber trade. There is a D.B. with a khansama near the railway station. The main road connecting Patna with Cuttack runs through Chakradharpur. Starting from Chakradharpur a very pleasant motor trip can be made to Ranchi (72 m.), and thence to Hazaribagh, Gaya and Patna. The road to Ranchi is metalled and bridged throughout, and rising about 1500 ft. between the 64th and 40th m. runs through very picturesque forest scenery. From Chakradharpur also it is possible to motor to Vyas Sarovar on the

Madras branch of the B.N. railway. The road passes through Chaibasa (16 m.), the headquarters of the district, and is metalled and bridged as far as the Baitarni river (52 m.), which forms the boundary between the district of Singhbhum and Keonjhar state. The Baitarni river is crossed by a fine bridge, and thence there is a good gravelled road passing through Keonjhar to Vyas Sarovar.

Chaibasa, the headquarters station of Singhbhum district, is situated about 16 m. to the S.E. A service of motor omnibuses (1½ hr.) connects it with Chakradharpur. It is also reached by rail (12 m.) from Amda (see below). Accommodation at the D.B. where there is a khansama. The country round Chaibasa is inhabited by the aboriginal race of Hos or Larka Kols. The great fair, which used to be held here in January, has been discontinued.

1042 m. **Amda**. A branch line of the B.N. Ry. runs through Chaibasa to Gua (65 m.) in the S. of the district where one of the largest and richest hæmatite deposits in the world is being opened up. There are also manganese and chromite deposits near Chaibasa.

1051 m. **Sini**. From here a branch line of the B.N.R. runs N.E. to Asansol, on the E.I.R., while the main direct line runs E. to **Kharagpur** and **Howrah**.

Sini Junction to Asansol.

On the line from Sini Jn. to Asansol are the following stations:—

17 m. from Sini and 1068 m. from Bombay, **Chandil** station. Before this place is reached the hills again close in on the line. **Dalma** hill, 3060 ft. above sea-level, is seen 12 m. E. Labourers for the tea-cultivation in Upper Assam

and Cachar were formerly recruited from this tract; but, owing to development of local cultivation of lac, now there is hardly any recruitment.

31 m. from Sini, **Barahabhum** Station, for Balarampur, where there are several shellac factories.

50 m. **Purulia** Station. Headquarters of the Manbhum district, through which the traveller has been passing for many miles. Pop. in 1921, 22,188.

From here a branch line runs to Ranchi (72 m.) and (101 m.) to Lohardaga (see below).

75 m. **Adra Jn. (R.)** Here the Kharagpur-Bankura-Gomoh line of the B.N.R. crosses the main line. At Mohuda, 13 m. from Gomoh, a branch runs to Barkakana (see below); the Ry. colliery at **Bokaro**, near Bermo stn. on this line, is a quarry with 80 ft. of solid coal-face and an estimated content of 70 million tons. From Bankura, 33 m. S.W. from Adra, a light ry. runs 60 m. E. to Rainagar, on the bank of the Damodar R.

101 m. from Sini and 1152 m. from Bombay **Asansol** junction station (D.B. and Inspection Bungalow). About 6 m. before Asansol is reached the river Damodar (p. 135) is crossed on a very fine bridge. From Asansol to Calcutta, a distance of 132 m., the traveller proceeds by the East Indian Railway (see p. 66), this route being 60 m. longer than the Kharagpur route.

Sini Junction to Ranchi and Kharagpur.

On the main direct line from Sini Jn. to Kharagpur, the first station of importance is:—

1068 m. from Bombay, **Tatanagar**, entrance to the great industrial centre of Jamshedpur, where the

parent company of Tata's Iron and Steel Works is now the centre of a ring of industries, covering tin-plates, agricultural implements, jute machinery, enamel ware, locomotive parts, etc. Pop. 80,000 and growing rapidly.

From Tatanagar a branch runs (106 m.) to **Barkakana**, a few m. W. of Ramgarh in the Damodar valley; and thence (113 m.) by an extension, opened for traffic in December 1928, to **Daltonganj** (p. 561), where connection is made with the E.I. Ry. broad-gauge line (80 m.) to Son East Bank.

At **Muri** (71 m. from Tatanagar on the Barkakana branch) is the junction with the line from Purulia (see above) to Ranchi and Lohardaga. The journey (262 m.) from Howrah to Ranchi by this route (*via* Kharagpur, Tatanagar and Muri) takes 12 hrs. (Ranchi express daily from Howrah).

Ranchi ★ (2100 feet above sea-level) is the summer capital of the Government of Bihar and Orissa, which is in residence here from May to October, and the headquarters of the Commissioner of the Chota-Nagpur Division.¹ The climate in the hot weather has little advantage over the plains, but in the rains and cold weather it is excellent. There are three hotels and two boarding-houses. The B.N. Ry. Co.'s hotel (electric light and good cuisine) is opposite the ry. station; the Silveroaks Hotel is on the Muir Road, 200 yds. from the Club, and Clayton's Hotel is in the compound of the Commissioner's old house. Taxis can be obtained, and there are five or six dealers in petrol and several repair garages. The Club will admit as honorary members visitors who have the necessary credentials. There are two golf courses, one good, the other

¹ For this interesting part of India Mr Bradley Birt's *Chota-Nagpur* (John Murray) may be consulted.

indifferent; both belong to the Club, but visitors staying at the Railway Hotel have the right to play on them. Ranchi is the seat of a missionary bishop of the Church of England, and there are three large missions, S.P.G., Roman Catholic, and Lutheran. The R.C. Mission, which is under the Archbishop of Calcutta, maintains an Apostolic School, a High School and Elementary Schools; as well as a convent and a boarding-school for girls. The S.P.G. have also good schools and a handsome church. The Sunday services at the Protestant and R.C. churches are largely attended by the Christian Kols, and are interesting. A visit should be paid to the schools of both these missions, where aboriginal women are taught to make lace. Two companies of Gurkha military police are stationed at Doranda, the old Cantonment (2 m.).

The motorist will find an admirable centre for excursions in Ranchi. Excellent metalled roads, with bridges where required, connect with Hazaribagh (58 m.), from which place (42 m.) Hazaribagh Road stn. on the E.I.R. Grand Chord Line (p. 591) can be reached, Purulia (96 m.), Chaibasa (88 m.) and Lohardaga (46 m.), the terminus of the ry. line from Purulia and the old district headquarters. The last-named road continues (96 m.) to **Neterhat**, a small plateau (3700 ft.), where there are four fully furnished Inspection Bungalows; when not required for official use, these are available to the public, on application to the Deputy-Commissioner at Ranchi. The Daltonganj road branches off from the Lohardaga road at Kuru (35 m.) and is suitable for motors throughout the year. Public motor-lorries run to Hazaribagh, Gaya, Chaibasa, and Lohardaga; arrangements can be made for first-class passengers. In addition to the places mentioned,

the following are accessible by motor-car: Jamshedpur, Giridih, Dhanbaid and Calcutta, and also Jaipur Road stn. (for Cuttack) on the B.N. Ry. main line from Calcutta to Madras (p. 503).

At Kanke, 5 m. from Ranchi, is a Mental Hospital, the largest of its kind in India, with separate blocks for Europeans and Indians. An experimental station for investigating problems connected with lac, which is the great local industry, has been established at Namkum (6 m. from Ranchi). At Itki (14 m. from Ranchi on the ry. to Lohardaga) a tuberculosis sanatorium is under construction. There is a fine waterfall at Hundru, 28 m. from Ranchi; the first 14 m. of the road are metalled and the remainder gravelled. The Ichadag sanatorium bungalow is 23 m. from the ry. station.

From Tatanagar, the main line proceeds to

1084 m. from Bombay and 139 m. from Howrah, **Galudih**. Near lie several copper mines. On the railway large copper works have been opened, with mill, refinery and bye-product recovery plant. Extensive deposits of copper sulphide exist in the hills running S.

1151 m. from Bombay and 72 m. from Howrah, **Kharagpur** (p. 502) jn. for the B.N. Ry. main line to Madras (Route 25), and 1223 m. from Bombay, **Howrah**, the Calcutta terminus (Route 6).

ROUTE 8.

KHANDWA to AJMER by **Mortakka** (for Omkarji), **Mhow** (for Mandu and the Caves of Bagh), **Indore**, **Ujjain**, **Ratlam**, **Nimach**, **Chitorgarh** (for UDAIPUR) and **Nasirabad**.

353 m. from Bombay on the G.I.P. Ry. main line to Calcutta (Route 2) is **Khandwa** (p. 44), the starting-point of the B.B.C.I. Ry. (metre-gauge), which passes through Ratlam to Ajmer, and connects there with the metre-gauge mail route to Jaipur and Delhi (Route 10).

38 m. from Khandwa **Mortakka** station, the **Narbada** river is crossed by a fine bridge, with a cart-road under the rails. There is a R.H. near the bridge, about 1 m. from the station, but inconvenient and without supplies; all provisions must be brought; bullock-carts procurable. The neighbourhood abounds in large game of every sort.

A passable metalled road of 6 m. leads E. to **Mandhata** (D.B.), more properly called **Omkarji**, a place well worth visiting. The trip will easily occupy a whole day, one night being spent at Mortakka.

The *Great Temple of Omkar* is situated in the island of Mandhata, in the **Narbada**. It is said that the island was originally called **Baidurya Mani Parvat**, but its name was changed to **Mandhata** as a boon from **Siva** to **Raja Mandhatri**, the seventeenth monarch of the **Solar Race**, who performed a great sacrifice here to that deity.

The area of the isle is about five-sixths of a sq. m., and a deep ravine cuts it from N. to S. At the N. the ground slopes gently, but terminates at the S. and E. in precipices 500 ft. high. At this point the S. bank of the **Narbada**

is equally steep, and between the cliffs the river is exceedingly deep and full of crocodiles and large fish. The village is built partly on the S. bank of the river and partly on the island. It is most picturesque, the rows of temples, houses and shops standing on terraces cut out of the sides of the hills, with the **Raja's** palace overhanging the rest.

On both sides of the river, which is crossed by a public ferry, the rocks are of a greenish hue, very boldly stratified. It is said that the **Temple of Omkar** and that of **Amreswar**, on the S. bank of the river, are two of the twelve great temples which existed in India when **Mahmud of Ghazni** destroyed **Somnath** in 1024 A.D. During the wars of the 17th and 18th centuries the S. banks were deserted and overgrown with jungle; and when the **Peshwa** desired to repair the temple it could not be found, so a new one was built, with a group of smaller ones. Afterwards part of it was found, and the late **Raja of Mandhata** built a temple over it; but its sanctity and even its name have been appropriated by that which the **Peshwa** built.

The **Raja of Mandhata**, who is hereditary custodian of the temples, is a **Bhilala**, and claims to be the direct descendant of the **Chauhan Bharat Singh**, who took **Mandhata** from **Nathu Bhil** in 1165 A.D. The old temples have suffered from the **Muhammadans**, and every dome has been overturned and every figure mutilated. The gateways are finely carved. The oldest temple is that on the *Birkhala rocks* at the E. end, where devotees used to cast themselves over the cliffs up till the year 1824, when the custom was abandoned. The temple consists of a courtyard, with a veranda and colonnades supported by massive pillars boldly carved. On the hill are the ruins of a very fine *Temple to Siddesvara Maha-*

deva, which stood on a plinth 10 ft. high. Round the plinth was a frieze of elephants 5 ft. high, carved in relief with remarkable skill on slabs of yellow sandstone; but all but two of the elephants are mutilated.

In front of the *Temple to Gauri Somnath* is an immense bull carved in a fine green stone, and 100 yds. farther is a pillar 20 ft. long. On the island itself all the temples are Saivite, but on the N. bank of the Narbada are some old temples to Vishnu and a group of Jain temples. Where the river bifurcates are some ruined gateways, and a large building on which are twenty-four figures of Vishnu well carved in green stone. Among them is a large figure of the boar Avatar. On an image of Siva in the same building is the date 1346 A.D. Farther down the bank, in the Ravana ravine, is a prostrate figure, 18½ ft. long, with ten arms holding clubs and skulls. On its chest is a scorpion, and at its right side a rat, and one foot rests on a prostrate human figure.

The bed of the ravine is covered with huge basalt blocks slightly carved. The *Jain Temples* stand on an eminence a little back from the river. The largest is on a plinth of basalt 5 ft. high. The E. wall is still complete. On each side of the doorway is a figure with Saivite and Jain emblems curiously intermixed. The hills near these temples, as well as the island, are covered with remains of habitations.

A great fair is held at the end of October, attended by 15,000 persons. According to a prophecy—the fulfilment of which the Brahmans at Mandhata anxiously await—the sanctity of the Ganges will expire in due course and be transferred to the Narbada.

41 m. from Khandwa (after crossing the Narbada) is **Barwaha** station (D.B.) the seat of a

palace of His Highness the Maharaja Holkar (no admission). A metalled road runs from here (44 m.) to Maheshwar (D.B.) the old capital of the Holkar family, in Nimár, on the banks of the Narbada, where is the magnificent **Chhattri** of Ahalya Bai (died 1795), widow of the son of Malhar Rao Holkar. Sir John Malcolm says of this lady: "The character of her administration was for more than thirty years the basis of the prosperity which attended the dynasty to which she belonged. She sat every day for a considerable period in open darbar transacting business. Her first principle of government appears to have been moderate assessment and an almost sacred respect for the native rights of village officers and proprietors of land. She heard every complaint in person, and although she continually referred causes to courts of equity and arbitration and to her Ministers for settlement, she was always accessible . . . Her charitable foundations extend all over India, from the Himalayas to Cape Comorin, and from Somnath to the Temple of Jagannath in the East." It is recorded of her that she had the courage to watch her daughter become *sati*, after vainly seeking to dissuade her from this act.

58 m. from Khandwa is **Choral** station. From this point the ascent of the Ghat of the Vindhya Range commences and continues almost into Mhow. The scenery is very fine. On approaching

71 m. **Patalpani** station, the waterfall of that name is passed.

74 m. **Mhow** station (R.), D.B. (13 m. from Indore), in the territory of the Maharaja Holkar, an important military Cantonment of British and Indian troops, headquarters of the Central Provinces Military District, 1900 ft. above sea-

level; population, 31,737. Troops are stationed here as provided in the Treaty of Mandasor of 1818. Mhow has no special interest for a traveller. The buildings and institutions are those common to all military centres in India. There is a hotel under European management.

From Mhow an expedition of 55 m. may be made S.W. to the ruined city of **Mandu**, the ancient capital of the kingdom of Malwa. It is in the territory of H.H. the Maharaja of Dhar, a Mahratta prince. Maharaja Anand Rao Puar (b. 1920, succ. 1926), whose State covers an area of 1777 sq. m. with a pop. of 230,333 and an annual revenue of 16½ lakhs. The best route to Mandu is by motor through the town of Dhar (33 m.), D.B. An alternative route of 58 m. is *viâ Manpur* (14 m. from Mhow), the headquarters of the Political Agent for the Southern States of Central India, which is 12 m. from Gujri (Insp. Bung.) on the Agra-Bombay road; it has the advantage of the beautiful ghat scenery. A third route (78 m.) is from Ratlam (p. 154) along a good metalled road. Motors can pass right into the old fort and, except in the rains, as far as the palace of Baz Bahadur. If it is proposed to stay at Mandu, intimation should be given to the Diwan of Dhar State two days before, when the D.B. in Mandu will be made available. Motors can be hired in Mhow for the trip. It is quite possible, by motor, to see all the main buildings and return to Mhow the same day. On arriving at Mandu it is most convenient to drive right through the ruins to the furthest point close by the pavilion of Rupmati, then work back to the Barnes Kothi, an ancient building turned into a convenient rest-house (food and bedding must be brought) where if necessary the night can be comfortably spent. It is situated

near the centre of the ruins. The expedition should not be made between the months of June and November, when the climate of the locality is very unhealthy.

Dhar is an old town of some historical and archaeological interest, containing several fine half-ruined mosques. Outside the N. wall of the Lat Masjid at Dhar, 1405 A.D., lies a lat, or pillar of wrought iron, thought to have been originally a pillar of victory. Jahangir in his diary stated that Bahadur Shah of Gujarat ordered it to be removed, but in this process it fell and broke in two: the smaller part, 13 ft. long, has disappeared; the larger part, 22 ft. long, remains *in situ*, partly buried in the ground. There is a good metalled road (56 m.) from Dhar to Ratlam.

Mandu¹ (1944 ft.), originally 37 m. in circumference, now occupies 8 sq. m. of ground, extending along the crest of the Vindhya; and is separated from the tableland, with which it is on a level, by a deep valley, above the Southern side of which the battlemented walls and gates of the old city rise very finely. Paths have been cut through the jungle to all the ruins of interest, the chief being the *Jami Masjid* (1454 A.D.), less injured than any of the others, and said to be the finest and largest specimen of Afghan architecture extant in India.² The courtyard is 90 yards sq. and is surrounded by a double colonnade. The mosque proper consists of five aisles of seventeen bays. To the W. of the

¹ A most interesting account of the ruins of Mandu was published by the late Sir James Campbell in the Gujarat Volume of the *Bombay Gazette*; see also *Dhar and Mandu*, by the late Col. C. E. Luard. The latest and most comprehensive book on the subject is, however, *Mandu, The City of Joy*, by G. Yazdani (Oxford University Press, 1929, 8s. 6d.).

² See Fergusson, *Indian Architecture*, 2, 246.

mosque a second enclosure contains the fine white marble tomb of Hoshang Shah Ghorī. Facing the Eastern entrance to the mosque are the remains of the mausoleum of Mohamed I. or II., and at its N.W. angle is the lower part of a circular tower of victory, formerly 7 storeys high. Between it and the great arched gateway in the Northern wall of the city are a number of ruined palaces and courts, including the **Jahaz Mahal**, or Ship Palace, which takes its name from the lakes between which it stands. It consists mainly of three great halls, with a beautiful little bath at the N. end : there is a fine view over the city from its roof. Close by is the **Hindola Mahal**, a hall of fine massive proportions. Further W. are the **Champa Baori**, a well with subterranean retreats for hot weather, and the remains of some baths. Two miles to the S.E. is the *Palace of Baz Bahadur*, Bayazid, the last king of Malwa, and on rising ground a short distance further stands the pavilion, of Rupmati, his wife.¹ From here there is a splendid view Southwards across the Narbada valley, 1000 ft. below. S.W., near the inner citadel of Songarh in that quarter, is a quaint ravine with temples and a small tank, specially mentioned in the memoirs of the Emperor Jahangir. These once magnificent buildings are still, in their ruined state, very striking on account of their massive proportions. The fortifications were constructed by Hoshang Shah Ghorī, who reigned in the beginning of the 15th century, and in whose time the city attained its greatest splendour. In 1526 Mandugarh was taken by Bahadur Shah, ruler of Gujarat, and annexed to his dominions, of which it remained part until their conquest by Akbar in 1570. Of late years

measures have been taken for the preservation of the most interesting ruins. Sir Thomas Roe, the Ambassador of James I. of England, entered Mandu in the train of Jahangir, part of the triumphal procession of the Great Mughal being 500 elephants. He complains of the lions which then infested the country, and killed one of his baggage ponies. The several Rulers of Mandu and Chitor were at feud with each other for many years.

Another interesting expedition can be made from Mhow to the **Caves of Bagh**, which are in the Gwalior State, 30 m. W. of Mandu. Good metalled road (87 m.) to the village of Bagh, 3 m. from the caves, through Dhar and the deserted British Cantonment of Sardarpur (travellers' bungalows at convenient stages); the road has been continued to the caves, and there is a small R.H. near them and also a comfortable State Inspection Bungalow in the village. Taxi-cars are available at Mhow. Two days should be allowed for the trip. It would be as well to consult the Superintendent of the Archaeological Dept. at Gwalior as to arrangements. The village of Bagh is situated on the river of that name, in a valley about 800 ft. above sea-level on the S. slope of the Vindhya hills. To the N. at the foot of a hill is the Baghesvari temple, which has been reconstructed from portions of a 12th-century building. The Caves,¹ which are to the E. of the village, were originally nine in number, but three are blocked by their fallen roofs. They are known locally as the *Panch Pandu ka*

¹ For the story of Rupmati and Baz Bahadur, see *The Lady of the Lotus*, by L. M. Crump (Oxford University Press, 2nd ed., 1928).

¹ See *The Bagh Caves*, a comprehensive account, with illustrations of the paintings, published by the India Society in 1927; and an excellent description, also with illustrations and plans, contributed by the late Col. C. E. Luard to the *Indian Antiquary* in 1910 (Vol. 39, pp. 225-235); also *My Pilgrimage to Ajanta and Bagh*, by Mukul Chandra De (1925).

Gupha, the Buddhist figures in the second cave being supposed to represent the five Pandava brothers. The excavations are in the face of a sandstone hill and occupy a frontage of 700 yds. They are manifestly the work of Mahayana Buddhists, and their date has been placed between the 7th and 9th centuries A.D. All are *viharas*, or monasteries; a small chamber at the back forms a *chaitya* or chapel, and the cells are at the sides. Cave No. 1, which is at the extreme N.E. of the cliff, is without interest but it is probably the earliest. Cave No. 2 (the Gossain's Cave) is the most complete of the series, although the paintings have been obliterated by smoke and bats. It is approached by a steep flight of steps which leads to the central entrance (the only one of the five doorways which is not blocked). There are eighteen cells round the cave, seven on each side and four at the rear. Two groups of well-executed figures stand on the sides of the antechamber representing a Buddha and two attendants. Two *dwarpalas*, or guardians are placed on either side of the entrance to the sanctum. This is the only cave in which there are figures. Cave No. 3 (the *Hathikhana*, or Elephants' Stable) contains paintings of the Buddha with kneeling worshippers on the walls of the chamber on the N.E. side of the hall, which is fronted by a pillared vestibule. Between this cave and the next are 200 yds. of solid rock. Cave No. 4, which has a common portico with No. 5, is the most magnificent of the series, and is known as the Rang Mahal or Painted Hall. The portico is covered with paintings of kings, horsemen, priests and attendants. Copies of these are in the Archaeological Museum at Gwalior and also at the British Museum. A colossal figure of Buddha stands in a recess 13 ft. high outside the portico. Cave No. 5 would appear

from its shape and arrangement to have been a lecture-hall (*shala*) or refectory. Cave No. 6 was evidently purely residential: it is entered by a small antechamber from No. 5. In 1910 signs of frescoes were visible in Cave No. 7, which is 45 ft. away from No. 6, but it has now collapsed. Caves 8 and 9 are also blocked up. N.E. of the Caves is the half-ruined shrine of a 12th-century Hindu temple, which is now used for the worship of Siva, but which contains a plaque, 4 ft. long, of Vishnu as Narayana lying on Sheshnag (or Ananda, the thousand-armed cobra who supports the world on his hood).

87 m. from Khandwa **Indore** station (D.B.). The capital of the State and residence of the Agent to the Governor-General for Central India. In February 1926 Prince Yeshwant Rao Holkar (born 1906) succeeded on the abdication of his father, Maharaja Sir Tukoji Rao Holkar III. The State covers an area of 9519 sq. m. with a pop. of 1,151,598 and an annual revenue of 124 lakhs. The State forces include an infantry battalion and a transport corps. The principal Chiefs of the House of Holkar have been Malhar Rao (d. 1765), the founder, who rode off the field of Panipat (p. 328): Ahalya Bai (d. 1795), the famous Queen of his son Khande Rao: Jaswant Rao (d. 1811): Malhar Rao II. (d. 1833): Tukoji Rao II., who was invested with ruling powers in 1852 and died in 1886: and Shivaji Rao (abdicated 1893).

Indore (population 93,091) stands on the banks of the rivers Sarasvati and Khan, on a wide plain 1738 ft. above sea-level. The site is healthy, and of recent years roads have been metalled, drains built, the water supply reorganised and the streets lighted.

The *Old Palace*, with its lofty many-storeyed gateway, faces the chief square. On the N. of it, and

separated from it by a street are the *New Palace* and garden. On the S. side of the square is the *Anna Chhattra* (alms-house), where food is daily distributed to the poor.

In the streets are some good timber houses, with deep recessed verandas, and carved corbels and pillars. To the W. of the Old Palace is the *Sarafa Street* of the Marwari money-lenders, and close by are the *Haldi Bazar* and the *Aditvar* or Sunday Street, where a market is held on Sundays.

On the W. bank of the Khan, near the bridge, is a statue, of no artistic merit, of Sir Robert Hamilton (1802-1887), who was A.G.G. in the years preceding the Mutiny. On the riverside, and elsewhere in the city, are numerous Chhattris erected to the memory of members of the Holkar family. The most important of these are on the Western outskirts of the town.

In the *Chhatttri Bagh*, an oblong enclosure surrounded by a battlemented wall, are the cenotaph of Malhar Rao Holkar I., richly ornamented with sculpture in low relief; a smaller one of Ahalya Bai (see p. 148), and one to her son Male Rao Holkar (died 1766): this is a twelve-sided building on a rectangular plinth also delicately ornamented with low relief sculpture. A similar walled enclosure a few hundred yards further down the Sarasvati contains the fine Chhatttri of Maharaja Hari Rao Holkar IV. (d. 1843).

Of modern buildings in the town the principal are the *King Edward Hall*, opened 17th November 1905, by King George V. (then Prince of Wales), whose visit is commemorated by the new *Courts of Justice*; the *M.R. Tukoji Rao Hospital*; and the *City High School*. There are also some flourishing cotton-mills. The *Institute of Plant Industry*, with its physiological laboratory and its apparatus for the preparation of silage, is worth a visit.

S.W. of the town is the *Lal Bagh*

palace, standing on the banks of the Sarasvati, amongst well-wooded gardens and grounds. 1 m. from this palace is the *Manik Bagh Kothi*, where the guests of the State are entertained; and 1 m. further (S. of the town) is *Holkar College* for preparing students for the University.

Adjoining the town, on the E., is the *British Residency*, an area assigned by treaty, and under British jurisdiction, containing the houses of the Agent to the Governor-General, the Residency Surgeon and other members of the staff; the quarters of the British Guard and Indian Escort of the Agent; the *Post Office*; the *Anglican* and *R.C. Churches*; the *Presbyterian Church of Canada*; the *King Edward Hospital*, with 160 students; the *Daly College*; and a beautiful *Park and Garden* through which flows the river Khan. Daly College, which was instituted for the education of Indian princes and nobles, is a fine marble building with a large hall and contains a series of portraits of Indian princes by Herbert Olivier. There are a branch of the Imperial Bank of India and an Agency of Messrs Ralli Bros.

About 3 m. to the S.W. of Indore is the still unfinished large new palace of *Shirpur*. In the same neighbourhood a large Black-buck preserve is maintained, and 1 m. beyond is Sukhnewás, a small pleasure palace surrounded by trees on the banks of a small lake.

In 1857 some of the State troops rose and attacked the Residency House, and also the Cantonment of Mhow on 1st July. The A.G.G., Colonel Durand, who had arrived at Indore only on 14th May, and the Europeans with him, were compelled, after a fight, to retire to Sehore and Hoshangabad. The Maharaja (Tukoji Rao Holkar II.) gave all the assistance he could and, in spite of the demands of

his troops, refused to surrender a number of Christians to whom he had given sanctuary in the palace. Captain Hungerford, with the Maharaja's help, drove the mutineers off from Mhow and remained there until a Bombay force reached that place. Sehore is 56 m. from Dewas on the Agra-Bombay road, and is the headquarters of the Political Agent in Bhopal (Route 9): supplies obtainable.

112 m. from Khandwa is **Fatehabad junction station (R.)**. From here a short branch line of 15 m. runs to

Ujjain (R.) (D.B.) (23 m. from Dewas,¹ on the Agra-Bombay road, and 42 m. from Agar, a former Cantonment of the Central India Horse. Junction for the G.I.P. Ry. broad-gauge line (114 m.) from Bhopal, and its prolongation (24 m.) to Nagda, where it meets the B.B.C.I. Ry. main line from Bombay to Delhi. This famous city (the Greek *Ὀζήνη*), which is one of the seven sacred cities of the Hindus, is situated on the right bank of the river Sipra, which falls into the Chambal after a total course of 120 m. The old name of Avanti, by which it was formerly known, was also applied to the Malwa country, of which it was once the capital. It is now in the dominions of the Maharaja Scindia of Gwalior. It stands in N. lat. 23° 11' 10", and is the spot which marked the first meridian of Hindu geographers. It is said to have been the seat of the viceroyalty of Asoka during the reign of his father at Pataliputra, now Patna, about 263 B.C. It is, however, best known as the capital of the legendary Vikramaditya (Valour's sun), long believed to be the founder of the Samvat

era. He was fabled to have driven out the Scythians, and to have reigned over almost all N. India, and at his court were said to have flourished the Nine Gems of Hindu literature—viz., Dhanvantari, Kshapanaka, Amarasinha, Shanka, Vetlabhatta, Ghata-karpura, Kalidasa (of European celebrity), Varanruchi, and Varaha-mihira. Ujjain, as well as the whole province of Malwa, was conquered by Ala-ud-din Khilji, who reigned at Delhi 1295-1317 A.D. In 1387 A.D. the Muhammadan Viceroy, Dilawar Khan Ghori, declared himself independent, and ruled from 1387 to 1405; he made Mandu his capital. In 1531 Malwa was conquered by Bahadur Shah, King of Gujarat, and in 1571 by Akbar. In 1658 the decisive battle between Aurangzeb and Murad and their elder brother Dara was fought near this city. In 1792 Jaswant Rao Holkar took Ujjain, and burned part of it. It then fell into the hands of Scindia, whose capital it was till 1810, when Daulat Rao Scindia removed to Gwalior.

In recent times, perhaps since the burning of 1792, Ujjain has somewhat changed its position. Scattered over the hills about 1 m. to the N. outside the present walls are a number of fine temples and other remnants of the ancient city. The modern city, which is oblong in shape and 6 m. in circumference, is surrounded by a stone wall with round towers, and on all sides by a belt of groves and gardens. It is lighted by electricity. The principal bazar is a spacious street, flanked by houses of two storeys, and having also four mosques, many Hindu temples, and a palace of Maharaja Scindia. Near the palace is an ancient gateway, said to have been part of Vikramaditya's fort. To the S.W. of this are the picturesque ghats and temples on the river; and outside the city to the S.E.

¹ There are two Maharajas of Dewas, of the senior and junior branch. Both are Mahrattas (Puars) of the same caste as the Maharaja of Dhar (p. 149).

are the remains of the **Observatory**, erected by Maharaja Jai Singh, of Jaipur (p. 225). 5 m. to the N. of the town is a picturesque Water Palace of the Sultans of Mandu on an island in the Sipra river.

161 m. Ratlam junction station (R. good) (D.B.) of the B.B. and C.I. Ry., main line from Bombay (*via* Baroda, Godhra, Nagda, Kotah, Bharatpur and Muttra) to Delhi (mail route), and of the R.M. Ry. (metre gauge) section of the G.I.P. Ry. from Ajmer to Indore, Mhow and Khandwa junction. Ahmadabad, 153 m., can be reached by the branch line, from Godhra to Anand, and Ujjain and Bhopal by the branch line from Nagda. Ratlam is the capital of Col. H. H. Maharaja Sir Sajjan Singh, K.C.S.I., K.C.V.O. The area of the State is 693 sq. m. with a pop. of 85,489 and an annual revenue of nearly 10 lakhs. It was founded by Ratan Singh, great-grandson of Uday Singh, Maharaja of Jodhpur. Ratan Singh was at the battle of Fatehabad, near Ujjain, in which Jaswant Rao Rathor, with 30,000 Rajputs, fought Aurangzeb and Murad, with the whole Mughal army. Tod (*Rajasthan*, 2, 40), says: "Of all the deeds of heroism performed that day, those of Ratna of Ratlam by universal consent are pre-eminent." The palace in which the Maharaja resides is within the walls, and is a fine new building, with a handsome reception-room. There is a Chauk or square built by Munshi Shahamat 'Ali. Beyond this is the Chandni Chauk of the bankers, which leads to the Tripulia Gate, and the Amrit Sagar tank. An excellent metalled road connects Ratlam with Mhow, 78 m.; Dhar, 56 m.; Mandu, 78 m.; and Indore (*via* Mhow) 92 m. Inspection Bungalows (without khansamas or supplies), with glass, crockery, knives, and forks, are situated at intervals of about 10 m.: one of these, at Sardarpur,

is interesting as having been constructed from part of an old "water-palace." D.Bs. (with khansamas) are at Dhar, Mhow, and Indore.

181 m. Jaora, the capital of the Muhammadan State, so named, shows a palace and some fortifications. The present chief is Lt.-Col. H. H. Nawab Sir Muhammad Iftikhar Ali Khan Bahadur, K.C.I.E. (born 1883, succeeded 1895). His grandfather rendered very loyal service in 1857. The area of the State is 601 sq. m., with a pop. of 85,778 and an annual revenue of nearly 12 lakhs.

213 m. Mandasor (Mandsaur) station. A fortified town remarkable as being the place where, in 1818, at the end of the Pindari War, a treaty was made between the British Government and Holkar. Severe fighting occurred here in 1857 between the rebels and a brigade of British troops moving from Mhow to relieve Nimach. The place was originally known as Dashapura, "the township of the ten hamlets"; and important discoveries have been made by the Archæological Dept. of the Gwalior State. In a field at Sondni, about 2 m. S.E. of the fort, are preserved on a modern platform two monolithic sandstone pillars, over 45 ft. high, with lion and bell capitals and bearing an inscription which records that Jasodharman, King of Malwa defeated Mihira-Kula, the Hun adventurer, at this spot (about 528 A.D.); also two images of Ganas (attendants on Siva) of the same period, and found in the same field. A remarkably fine statue of Siva of the 5th century stands in the Fort; and here also is a carved pillar of a temple gateway. Both are admirable specimens of the Gupta period (6th century A.D.).

243 m. Nimach (Neemuch) station * (R.) (D.B.). In 1857 the

place was garrisoned by a brigade of native troops of all arms of the Bengal army. This force mutinied and marched to Delhi; the European officers took refuge in the Fort, where they were besieged by a rebel force from Mandasor, and defended themselves gallantly until relieved by a brigade from Mhow. Some forty-two ladies and non-combatants found refuge at Udaipur (p. 159). A regiment of Indian infantry is now quartered here.

278 m. from Khandwa is **Chitorgarh** * station. (Branch line to Udaipur, 69 m.) The famous **Fort**¹ crowning the rocky ridge, on the E. of the line, is about 3 m. distant (2 m. to the foot; 1 m. ascent), and the road is fairly good. No permission to visit the Fort is necessary, but it is desirable to inform the Hakim of Chitor (the district official) by letter in advance of arrival; when he will usually arrange for a tonga in which to make the ascent of the rock. Visitors of foreign nationality are recommended to approach the Resident at Udaipur in the first instance. There is a small D.B. about $\frac{1}{2}$ m. from the railway station; by giving notice, food can be supplied.

History.—The history of Chitor is written imperishably in the annals of Rajputana. Three times has she been besieged and sacked, and three times did her defenders prefer death to surrender. So powerful a hold does the triple tragedy exercise over the popular mind that the "crime of the sack of Chitor" is to this day an expression of recrimination among Rajputs. The first siege—of which the details are more or less legendary—took place in 1303 A.D. when Ala-ud-din Khilji, the Pathan

Emperor, appeared before the gates of Chitor to claim the beautiful Padmani, wife of the Rana's uncle, Bhim Singh. The attempt miscarried at the outset, owing to a ruse by which Bhim Singh, who had been taken prisoner, was released, and the attack defeated. But Ala-ud-din returned; and when he was about to prove successful, in spite of the sacrifice of eleven royal princes, each made Rana for a day, all the Rajput women marched in procession to an underground cave, Padmani entering last, and were there immolated by fire. The famous *jauhar* having been thus performed, Bhim Singh and his clansmen arrayed themselves in bridal robes of saffron and sallied forth to meet their death at the swords of the Moslems. Ajai Singh was the sole member of the royal house who escaped. The second siege came two hundred and thirty years later, in 1535, at the hands of Bahadur Shah, Sultan of Gujarat. The Rajputs put up a stout resistance; the Queen-Mother, Jawahir Bai, a Rathor princess, set an example of courageous, but unavailing devotion by heading a sally, in which she was slain. At last nothing remained but to put the last hope of the Sesodias, the infant Udai Singh, in a place of safety, and to die fighting. As Chitor can only be defended by royalty, the crown of Mewar was placed on the head of Bagh Singh, the prince of Deolia.¹ The *jauhar* was again commanded, and thirteen thousand Rajput women gave themselves to the flames. The gates were then thrown open, and the Deolia chief, at the head of his saffron-clad warriors, rushed on his fate. Every clan lost its chief; and over 32,000 Rajputs were slain during the siege and storm. In 1567 Chitor was for the third time besieged and sacked. But al-

¹ For a striking account of this wonderful Fort, see *The Naulakha and Letters of Marque*, both by Rudyard Kipling.

¹ The present Maharawat of Pertabgarh, a ruling chief, is descended from Bagh Singh.

though Akbar triumphed, the honour and the glory rested with the Rajputs, and more particularly with two of the superior vassals of Mewar, Jaimal, the Rathor Thakur of Bednor and Patta (Fatha), the Sesodia Rawat of Kelwa.¹ The Maharana Udai Singh had quitted the Fort when Akbar sat down before it; and when the Salumbar chief² fell at his post, the "Sun Gate," the command devolved upon his fellow-clansman Patta. His mother bade him put on the saffron robe, and both she and his bride died fighting by his side. Jaimal took the lead when the Sesodia fell, but was killed by a shot fired by Akbar himself. For the third time in the history of Chitor, the *jauhar* was performed, and few, if any, of the 8000 Rajputs who passed through the opened gates survived to "stain the yellow mantle." Again all the clans lost their chiefs: nine queens and five princesses perished in the flames; and 1700 of the immediate kin of the Maharana sealed their duty to their country with their lives. The names of Jaimal and Patta are still household words in Mewar, and their deeds are the subject of many a Rajput ballad. Even Akbar showed his sense of their valour by erecting their statues mounted on elephants at the Delhi Gate of the Delhi Fort, where Bernier saw them in 1663.³ Chitor was now lost to the Maharana, and he transferred his capital to Udaipur.

¹ The descendants of Jaimal and Patta are still among the nobles of Mewar, who form a numerous and powerful body. The territories of the Mewar Omraos and Rawats comprise more than half the State, and they have the right to sit in darbar above the heir-apparent. For this reason the heir-apparent never appears at a public darbar.

² The Salumbar Chief had the hereditary right to lead the van in the battle, and to command the Suraj Pol gate of the fortress when besieged. On all old grants the sign of the Salumbar lance precedes the Udaipur monogram.

³ They were afterwards removed and have been replaced by Lord Curzon (p. 302)

The Fort.—The abrupt rocky hill, crowned by the magnificent Fort, rises 500 ft. above the surrounding country, and is a very conspicuous object, though its great length of $3\frac{1}{4}$ m. makes it look lower than it really is. The builder of the Fort is not known, but it was certainly in existence in the 7th century A.D., when it was taken by Bappa Rawal from the Mori Rajputs, its previous owners. Up to the year 1568 A.D. the city was situated within the Fort. The modern town of Chitor, known as Talaiti or Lower Town, lies at the foot of the hill, surrounded by a wall. It is necessary to drive through its narrow and crooked streets in order to reach the principal entrance to the Fort, which is on the W. The Gambheri river below the famous fort is crossed by a massive old bridge of grey limestone, with ten arches, all of pointed shape, except the sixth from the W. bank, which is semicircular. The gateways and towers which existed at either end of the bridge have now disappeared. An ascent 1 m. long, with two zigzags, leads to the summit, and is defended at intervals on the W. by seven magnificent gateways, large enough to contain guard-rooms and even fine halls. They are the Pádál Pol, the newly rebuilt Bhairon or Tuta (Broken) Pol, the Hanuman Pol, the Ganesh Pol, the Jorla Pol, the Lakshman Pol, and the Main Gate, or Ram Pol. The gate on the E. is the Suraj Pol, or Sun Gate. At the N. extremity is another gate, the Lokhota Bari, and near the S. extremity is a small aperture in the wall through which traitors and criminals were thrown out. The whole of the summit is covered with ruins of palaces and temples, and the slopes with thick jungle. In the Fort itself, there is a village of some size and cultivation, and a large palace has been built by the present Maharana.

Immediately outside the Pádál Pol, on the left, is an erect stone marking the spot where Bagh Singh, the chief of Deolia, was killed during the siege of Chitor by Bahadur Shah, of Gujarat, in 1535.

Between the "Broken" and the Hanuman gates there are on the right two chhattris marking the spots where the renowned Jaimal of Bednor and his clansman, Kalla, were killed in Akbar's siege in 1568. Kalla carried his wounded chief down to have a last stroke at the enemy, and both died fighting. Another chhattri indicates the place where the equally famous Patta (or Fatha) of Kelwa fell.

Facing the Ram Pol, or main gate is a pillared hall, used as a guard-house, and apparently of ancient construction. From the top of this hall, on which there are two four-pillared chhattris, a fine view of the plain is obtained.

The Ram Pol is a large and handsome gateway, crowned by a Hindu horizontal arch, in which the upper courses of either side, projecting inwards, overlap each other till they meet, or nearly so, and are then connected by an overlying slab. This is the construction of all the gateways on the ascent, except the Jorla, though in one, the Lakshman, the lower angles of the projecting courses are sloped off, giving the whole the outline of a regular pointed arch. Inside the gate, on each side, is a fine hall, supported on square-shaped and slightly-tapering antique pillars.

The principal objects of interest among the ruins of the old city are the Towers known as the *Kirti Stambh* or Tower of Fame, and the *Jaya Stambh*, or Tower of Victory. The **Tower of Fame**, which is much the older, stands up grandly near the E. rampart, and is reached by the broad road turning to the left inside the Ram Pol, and passing the Kukreswar Kund

and Palace of Ratna Singh, or by a path proceeding directly to the E. Fergusson thus describes it :¹ "One of the most interesting Jaina monuments of the age (the first or great age of Jaina architecture, which extended down to about the year 1300, or perhaps a little after that) is the Tower formerly known as Sri Allata's (who ruled 953-972). It is a singularly elegant specimen of its class, about 75 ft. in height, and adorned with sculptures and mouldings from the base to the summit. An inscription once existed lying near its base, which is said to have given its date as 895 A.D., though the slab has now been lost. This, however, is much too early a date for the style of the structure. . . . The tower most probably belongs to the 12th century, and, it is said, was dedicated to Adinath, the first of the Jain Tirthankars, and nude figures of them are repeated some hundreds of times on the face of the tower, distinguishing it as a Digambara monument. The temple in the foreground, S. side, is of a more modern date, being put together, partly, of fragments of older buildings, which have disappeared."

The tower consists of seven storeys, with an internal narrow and cramped staircase; the roof of the open top storey, which rests on pillars, was much damaged by lightning, but has been well restored. Fragments of an inscribed stone are on the ground under a tree just N. of the tower.

S. of the Tower of Fame the very ancient temple of Nilkantha Mahadeo is passed on the right, and the **Suraj Pol**, or Sun Gate, and its tanks on the left. At the Suraj Pol is a chhattri which marks the spot where the Rawat of Salumbar fell when defending the gate during Akbar's siege. A mile farther on is the Raj Tila or State

¹ *Indian Architecture*, 2, 57.

hill, the loftiest point on the tableland; the broad road passes round this and returns N. by the Mori Tank, but walkers will probably cross from the E. gate (the Suraj Pol) across the Chaugan, where sports and games are held, to the palace of **Rani Padmani**—a large building overlooking a tank. In the tank itself, surrounded by water, is another lofty building, which is said to have been Padmani's island retreat. Both the palace and the island house have been spoiled by whitewashing and renovation in the modern style. From this palace Akbar carried off the famous gates now in the fort at Agra (p. 272). From near this point the road leads past the picturesque ruined palaces of Jaimal and Patta to the **Jaya Stambh** or **Tower of Victory**. Fergusson says: "A revival of Jaina architecture took place in the 15th century, especially under the reign of Kumbha, one of the most powerful of the kings of the Mewar dynasty, whose private capital was Chitor. His reign extended from 1428 to 1468, and it is to him that we owe the other of the two towers that still adorn the brow of Chitor."

... This one was erected to commemorate his victory over Mahmud Khilji, of Malwa, in the year 1440. It is therefore in Indian phraseology a *Kirtti* or *Jaya Stambha*, or Pillar of Victory, like that of Trajan at Rome, but in infinitely better taste as an architectural object than the Roman example, though in sculpture it may be inferior.

... It stands on a basement 47 ft. square and 10 ft. high, being nine storeys in height, each of which is distinctly marked on the exterior. A stair in the interior communicates with each, and leads to the two upper storeys, which are open, and more ornamental than those below. It is 30 ft. wide at the base, and 122 ft. in height, the whole being covered with

architectural ornaments and sculptures of Hindu divinities to such an extent as to leave no plain parts, while at the same time this mass of decoration is kept so subdued that it in no way interferes either with the outline or the general effect of the pillar." The old dome was injured by lightning, and a new one was substituted by Maharana Sarup Singh, 1842-61. The stair is much wider and easier than that in the Jain tower (the small Kirtham), and in the inside are carvings of Hindu deities with the names below. In the top storey are two of the original four slabs with long inscriptions. The tower took seven to ten years to build—from 1458 to 1468. On the road at the corner of the lower platform is a square pillar recording a *sati* in 1468 A.D.

S.W. of the Tower of Fame is the **Mahasati**, a small wooded terrace, the prettiest spot on the hill, which was the place of cremation of the Ranas before Udaipur was founded. Here there are many *Sati* stones, recording the self-immolation of the widows of the princes and nobles. Below, on a low terrace, are the Gaumukh springs and reservoir. The springs issue from the cliff at places carved with a cow's mouth—hence the name. This is a most picturesque spot; and near by is the opening of the cave where Rani Padmani and the Rajput ladies are said to have performed the *jauhar*. To the S.W. is an ancient temple, built by Rana Mukalji, beside which is a huge carved head of Vishnu.

To the N. of the Tower of Victory rises the **Temple of Vriji**, built by Rana Kumbha about 1450—a massive building with a *Sikhara* (or tower) of unusually large proportions (see Fergusson, *Indian Architecture*, 2, 151). Hard by is a similar temple, built by his wife, the famous Mira Bai, of which

the chief peculiarity is that the procession path round the cell is an open colonnade with four small pavilions at the corners. Between the Tower and the Ram Pol are the Nau Katha Magazine and Nau Lakha Bhandar, or Treasury, and on the wall connecting these is a small and very beautiful Jain temple. Near this is the **Palace of Rana Kumbha** a building of great charm and interest, although in a ruinous condition. The road now traverses the old Moti Bazar to the Western Gate, and completes the circuit.

8 m. N. of Chitorgarh is Nagari, the remains at which are described by Prof. D. R. Bhandarkar, in No. 4 of *Memoirs, Arch. Survey of India* (Calcutta, 1920).

A branch line, 69 m., runs from Chitorgarh to Udaipur. The Agency House at Dabok, where Colonel Tod, the first Resident and author of the *Annals of Rajasthan*, lived, lies in ruins a few miles S. of Debari, 8 m. E. of the capital.

About 2 m. before reaching Udaipur, the Arh river is crossed, with the old ruined town of that name on its banks. This stream collects the whole drainage of the Girwa, the natural outlet from which was dammed up with an immense masonry embankment by Maharana Udai Singh, and thus forms the Udai Sagar Lake (2½ m. by 1½ m.), the surplus waters from which, escaping, form the Birach river, which flows past Chitorgarh. The railway stops about 3 m. E. of

UDAIPUR (2034 ft. above sea-level) is the marvellously picturesque capital of the State of Mewar. "Udaipur, like the Taj at Agra, baffles brush and pen," writes Sir Walter Lawrence (*The India We Served*, p. 74). "The exquisite lake, with its background of dimpled velvet hills, the white palace, mirrored in the clear water, but above all the beautiful mankind, are ever in my mind." The ruling family, which is Sesodia

Rajput by caste, is descended from the Suryabansi, or Sun-stock, royal dynasty of Oudh, and is the premier house of India in point of blue blood. The present representative is H.H. Maharajadhiraja Maharana Sir Fateh Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., born 1849. His Highness, who succeeded his kinsman in 1884, is generally known as "The Sun of the Hindus," and the sun in splendour is emblazoned on his standard. He is entitled to a permanent salute of 19 guns and a personal and local salute of two extra guns.¹ The State covers an area of 12,691 sq. m. with a pop. of 1,380,063 and an annual revenue of 51 lakhs. The city of Udaipur was founded after 1568 by Maharana Udai Singh (who had been saved from being murdered as a baby by the devotion of his nurse, who substituted her own child), on the capture of Chitorgarh, which he left to its fate. The States of Udaipur, Jodhpur (Rathor), Jaipur (Kachhwaha Chauhan), and Bundi (Hara Chauhan) are the four original great States of Rajputana. The rest are either derived from them or had their origin long subsequent to them.

There is a good road from the station to the Udaipur Hotel, which lies just outside the N.E. corner of the city. Tongas and hotel car available. Two full days, or more, can be well spent here.

The *City* (pop. 34,789) is surrounded by a bastioned wall, which, towards the S., encloses several large gardens. The W. side is further protected by the beautiful Pichola lake, and the N. and E. sides by a moat supplied from the lake, while on the S. the fortified hill of Eklinggarh rises steep and wooded. The principal gateways are the Hathi Pol or "Elephant Gate," to the

¹ Former Maharanas of Udaipur have been: H.H. Sarup Singh (1842-61); H.H. Sir Shambhu Singh, G.C.S.I. (1861-74); H. H. Sir Sajjan Singh, G.C.S.I. (1874-84).

N. ; the Kishan Gate, to the S. ; the Suraj Pol, or "Gate of the Sun," on the E. ; the Delhi Gate, on the N.E., and not far from the Hotel ; and the Chand Pol, or "Moon Gate," on the W., opening on to the bridge across the N. end of the lake.

N. of the Hotel is the Residency garden ; the Victoria Hall and Museum, with a statue of the Queen-Empress, are inside the city wall. To the W. of the city is the Sujjangarh hill, 1100 ft. above the Fateh Sagar lake, with beautiful views of the lake from it. The Sujjangarh Palace is a striking feature on the hill.

The main street of the city leads from the Hathi Pol (Elephant Gate) to the Maharana's palace, passing a clock tower and the Lansdowne Hospital. The great Jagannath or Jagdish temple (built c. 1640), is approached by a fine flight of steps, with an elephant on each side at the top. The temple, though late in date, is a good example of the Indo-Aryan style, figured in book vi. chap. iv. of vol. 2 of Fergusson's *Indian Architecture*. The tower is ornamented by bold figured friezes and other architectural decoration. In front of the temple is a shrine with a brazen image of a Garuda. The Royal Palace (visible on application to the Private Secretary to the Maharana—without his permit only a few parts can be seen) is an "imposing pile of granite and marble, of quadrangular shape, rising at least 100 ft. from the ground, and flanked with octagonal towers, crowned with cupolas. Although built at various periods, uniformity of design has been well preserved ; nor is there in the E. a more striking structure. It stands upon the very crest of a ridge, running parallel to, but considerably elevated above, the margin of the lake. The terrace, which is at the E. and chief front of the palace, extends throughout its

length, and is supported by a triple row of arches, from the declivity of the ridge. The height of this arcaded wall is full 50 ft., and although all is hollow beneath, yet so admirably is it constructed that an entire range of stables is built on the extreme verge of the terrace, on which all the forces of the Maharana—elephants, cavalry, and infantry—are often assembled. From this terrace the city and the valley lie before the spectator, whose vision is bounded only by the distant hills ; while from the summit of the palace nothing obstructs the view over lake and mountain."¹

The entrance to the palace is through the Bari Pol (1600 A.D.), or Great Gate, containing the Royal drums, and by the inner Tripolia (1725 A.D.) ; between the two gates are eight carved arches or torans, under which various Maharanas have been weighed in the past against gold and silver, afterwards distributed in largesse. Beyond the Tripolia the Ganesh Deori gate leads S. to the fine old court known as the Rai Angan or Royal courtyard (1571 A.D.), adjoined on the E. side by the Jewel Room, and from this the visitor will be conducted over a number of palace enclosures—all picturesque, and some beautifully decorated. Of these the Chhoti Chitra Shali has brilliant mosaics of peacocks, the Manak (Ruby) Mahal is filled with figures of glass and porcelain, the Moti (Pearl) Mahal is decorated with mirrors, and the Chini ki Chitra Mahal (1711-34) has beautiful ornamentation of inlaid mirror work and fine tiles of Dutch and Chinese make ; the Bari Mahal, or Amar Vilas (1699-1711), has a charming garden in the centre of it. On the W. side of the Tripolia are the Karan Vilas (1620-28 A.D.) and Khush Mahal buildings, while

¹ *Handbook of Mewar*, by Mehta Fateh Lal, son of a Prime Minister of the Mewar State.

southwards lies the Shambhu Niwas Palace, to which the present Maharana has added yet another residence, the Shiv Niwas. The Pichola lake ($2\frac{1}{2}$ m. by $1\frac{1}{2}$ m.) bounds the city and palaces on the W. side. Its embankment is reached through a series of beautiful gardens S. of the palaces, and named the Sajjan Niwas, but commonly called the Gulab Bagh; and from these a road runs past the Dudh Talao down the E. side of the lake to the Khas Odi, built by Maharana Sir Sajjan Singh (1874-84) at its Southern end for use as a shooting-box. The feeding at this place of the wild pigs every evening affords a very curious sight. Beautiful as the lake is when seen from the palace and other points, the view on it near the S. end, with the marble-capped islands in the foreground and the lofty palace and city in the distance, is one of still greater loveliness. The Southern island is named the Jagmandar (1640 A.D.), and is chiefly notable for the Gul Mahal, a domed pavilion—most of the other buildings date from the 18th century. On it Prince Khurram, later Shah Jahan, lived when in revolt against his father, the Emperor Jahangir, and the refugee ladies and children from Nimach (p. 154) were protected in 1857 by Maharana Sarup Singh.¹ Farther N. is the Jagniwas Palace island (1740 A.D.), with the older Dilaram and Bari Mahal palaces, in beautiful gardens, and also, unfortunately, with a modern palace and villa; and beyond this again to the W. are two small structures in the lake. Visitors who wish to go on the lake in boats should, by arrangement embark at the Sarup Sagar Ghat, near the mission house at the N. end of the chain of lakes (the Sarup Sagar, the Rang Sagar and the Pichola); a gratuity to the boatmen at the

end is alone customary. Visitors can land and be shown over the two islands, and can go to Odi Khas. By previous arrangement one way can be done by boat, the other by carriage. The view of the city and ghats and palaces from the bridge below the Gangour Ghat is also specially effective. This bridge is reached by diving into the slums to the W. of the main street; also by using a boat. On the bank of the Pichola lake, immediately N. of and adjoining the Shambhu Niwas, is the Minto Hall, of which the foundation-stone was laid during Lord Minto's Viceroyalty; it is intended to serve as a Darbar hall. N. of the Pichola lake and connected with it by a canal, is the fine Fateh Sagar constructed by the present Maharana. The foundation-stone of the great embankment was laid by the Duke of Connaught in 1889. It can be reached by the road going W. from the hotel, which winds among the hills and along two sides of the lake, and then crosses the dam. Underneath the dam is the *Sakelion-ki-bari*, or Slave Girls' Garden, well laid out. On the way back from this, the *Residency* is passed. A visit should be paid to the *Victoria Hall* and *Museum* with its statue of that Queen; also to the *Central Jail*, to see the carpet weaving and other industries.

W. of the city is the Sajjangarh hill, 1000 ft. above the Pichola lake, surmounted by a palace, from which a fine view can be obtained as a reward for an arduous ascent.

Two m. S. of the hotel, on the road to the station, are the remains of the ancient city called Arh, or Ahar. The Chhatris or cenotaphs of the Maharanas at Arh, containing the royal ashes, stand in what is called the Mahasati or royal place of cremation, which is enclosed by a lofty wall, and is adorned by many fine trees. The most remarkable are those of San-

¹ The Maharana swore that anyone who dared to violate the sanctity of their refuge should die by his hand. (Sir W. Lawrence, *The India We Served*, p. 74.)

gram Singh II.¹ (1734), a large and beautiful structure, and of Amar Singh (1621), grandson of Uday Singh. Besides the modern village of Arh there are ruined temples of an older town.

Special arrangements are necessary to visit the *Great Lake at Kankroli*, or Rajnagar, called the Rajsamund,² 35 m. to the N. of Udaipur. The retaining wall is of massive masonry, in many places 40 ft. high. The Bund, or Ghat, is 1115 ft. long, with pavilions and torans, or ornamental arches, all of marble and exquisitely carved; behind is an embankment 35 yds. wide. It was erected in 1660 by Rana Raj Singh, who defeated Aurangzebe on many occasions. On the S.E. side of the lake is the town of Kankroli, with a beautiful temple. There is a fair cart-track to this place. 14 m. N. of Udaipur in a bold ravine are the Eklingji lake and temple, a beautiful structure of white marble, sacred to the family deity of the Maharana. Near this, at Nagda, are two fine Jain temples, called the Sas Bahu, or Mother and Daughter-in-law.

The Jaisamand lake, made by Rana Jai Singh at the end of the 17th century, is about 32 m. S.E. of Udaipur; it is one of the largest artificial lakes in the world, measuring about 9 m. by 5 m., and is one of the most beautiful sights in India. The dam is 1000 ft. in length and 98 ft. in height. There is a fair road to it, which can be used by motor cars. It runs through a wild country.

379 m. from Khandwa is **Nasirabad** station, D.B., 1 m. (population 19,651), the military Cantonment for Ajmer, from which it can conveniently be visited by train, or by a picturesque road through some fine hills (14 m.). The station was originally laid out in 1818 by

Sir David Ochterlony. Interest is attached to Nasirabad from the fact that when the Mutiny broke out in 1857 the 1st Bombay Cavalry were compelled to remain neutral—though loyally inclined—as their families were at the mercy of the Bengal regiment, which mutinied and marched to Delhi.

Deoli, formerly a small Cantonment, now a Municipality with a small detachment of Mina levies, lying 57 m. S.E. of Nasirabad, may be reached by tonga, or motor, ordered from the latter place. The Kotah contingent stationed at Deoli in 1857 marched to Agra, but mutinied there.

Thirty m. beyond Deoli is the picturesque city of **Bundi** (D.B.)—introduction to Political Agent (Haraoti Tonk Agency, Deoli), necessary. The area of the Bundi State is 2220 sq. m., with a pop. of 187,000 and an annual revenue of nearly 12 lakhs. The present Chief, Maharao Raja Ishwari Singh, was born in 1893 and succeeded in 1927. His two immediate predecessors ruled from 1821 to 1927, Maharao Raja Sir Ram Singh, G.C.S.I., for 67 years, and Maharao Raja Sir Raghubir Singh, G.C.S.I., G.C.I.E., G.C.V.O., who was honoured with a visit from H.M. Queen Mary in December 1911, for 39 years. The family belongs to the Hara Chauhan clan of Rajputs, which is one of the four Agnikula created by Vishnu at the fire-pit at Gao Mukh on Mount Abu (p. 214).

393 m. from Khandwa is **Ajmer** junction station, whence the metre-gauge mail route to Delhi of the B.B.C.I. Ry. proceeds *via* Jaipur and Rewari (Route 10, p. 220).

¹ See Fergusson's *Indian Architecture*,

², 165.

² *Ibid.*, 184.

ROUTE 9.

ITARSI JUNCTION to JHANSI
by Bhopal, Sanchi, and Bina
(line S.E. to Saugor), and from
Jhansi to

- (1) Kalpi and Cawnpore ;
- (2) Orchha, Barwa-Sagar, Harpalpur (for Nowgong and Khajuraha), Banda, and Manikpur ;
- (3) Datia, GWALIOR, Dholpur, and Agra, Muttra, and Delhi.

Itarsi junction station, 464 m. from Bombay on the G.I.P. Railway (see p. 45). The " Punjab Limited " mail train from Bombay branches off here and proceeds *via* Jhansi and Gwalior to Agra, 24 hrs., and to Delhi, Lahore, and Peshawar, 27, 38 and 50 hours respectively. Fares from Bombay to Delhi, Rs.85-13-0, Rs.42-15-0 and Rs.16-1-0.

12 m. Hoshangabad station (476 m. from Bombay, 481 m. from Delhi), D.B. (1 mile), named after Hoshang Ghorī (p. 150). A town with population of 12,048, and headquarters of a district. Passing this the railway crosses the Narbada (dividing Bhopal from British territory) on a fine bridge. About 4 m. N. of the Narbada river the well-wooded, picturesque ascent of the ghat commences, and at the top the line runs on the tableland of Malwa, with an average elevation of 1500 ft.

57 m. from Itarsi and 521 m. from Bombay is Bhopal stn. (R.), D.B. near the ry. stn. The town (pop. 45,094) stands on the N. bank of a fine and extensive lake, $4\frac{1}{2}$ m. long and $1\frac{1}{2}$ m. broad, and is enclosed by a wall some miles in length. It is the capital of the State of Bhopal, under the Central Indian Agency, with an area of 6902 sq. m. Visitors who can obtain an introduction to H.H.

the Nawab can be comfortably entertained at the State Guest House—a handsome and well-appointed building situated on the edge of the beautiful lake. Carriages are always available for such visitors. Sanchi can be conveniently visited from Bhopal, and, if sufficient notice is given, elephants can be obtained for ascending the hill to the topes. The dynasty was founded by Dost Muhammad, an Afghan chief in the service of Aurangzeb, who took advantage of the troubles that followed the Emperor's death to establish his independence. His family have always shown their friendship for the British. In 1778, when General Goddard made his famous march across India, Bhopal was the only Indian State which showed itself friendly. In 1809, when Colonel Close commanded another expedition in the neighbourhood, the Nawab of Bhopal applied to be received under British protection, but without success. The Nawab then obtained assistance from the Pindaris in the gallant struggle he maintained to defend himself against Scindia and Raghoji Bhonsla, in the course of which his capital underwent a severe but ineffectual siege.

In 1817 the British Government intervened and formed an alliance with the Nawab, who was, in 1818, guaranteed his possessions, by treaty, on condition of furnishing 600 horse and 400 infantry, to maintain which five districts in Malwa were assigned to him. He was soon afterwards killed by a pistol accidentally discharged by a child. His nephew, a boy, was declared his successor, and betrothed to his infant daughter, but the Nawab's widow, Kudsia Begam, endeavoured to keep the government in her own hands, and the declared heir resigned his claim to the throne and to the hand of the Nawab's daughter, Sikandar Begam, in favour of his brother Jahangir Muhammad.

After long dissensions Jahangir Muhammed was installed as Nawab in 1837, through the mediation of the British. He died in 1844, when his infant daughter, Shah Jahan, was recognised as his successor, and Sikandar Begam, his widow, was made regent. After the Mutiny of 1857 Sikandar Begam was made the actual ruler, Shah Jahan becoming heir-apparent. Sikandar Begam died in 1868. Shah Jahan Begam ruled till 1901, and was succeeded by Nawab Sultan Jahan Begam, who abdicated in 1926 in favour of her surviving son, Nawab Haji Muhammad Hamidulla Khan, C.S.I., C.V.O. The State maintains one squadron Lancers, one Pioneer Battn., one battery Horse Artillery, one motor Machine-gun battery, and two platoons Infantry. A Bhopal State Council was constituted in 1922.

The name of Bhopal is said to be derived from that of its founder, Raja Bhoj, and the dam by which he formed the Tank, dam being in Hindi *pal*. Thus Bhojpal has been corrupted into Bhopal.

The *Palace of the Nawab* is not of much architectural beauty, but is a large and imposing building. The *Citadel* walls afford a fine view of the lake and surrounding country. The *Jami Masjid* was built by Kudsia Begam, and the *Moti Masjid*, which somewhat resembles the Mosque at Delhi, by Sikandar Begam. The *Mint* and *Arsenal*, and the *Gardens* of the Kudsia and Sikandar Begams also deserve a visit. Other objects worth seeing are the *Taj-ul-masajid*, commenced by Shah Jahan—when completed it will be the largest mosque in India; the King Edward Museum, opened by Lord Minto in 1909; the armoury in the Fatehgarh Fort (the Citadel); the very picturesque *Chauk* in the centre of the city; the Lady Lansdowne Hospital, and the club for *parda*

ladies which was established by Sultan Jahan Begam; the Alexandra High School for boys in the Be-nazir palace, the most picturesque building in Bhopal; the Sultania Girls' School in the Taj Mahal palace; the lines of the Imperial Service Cavalry, and the polo ground. The roads and main buildings are lit by electric light. The town waterworks were built by Kudsia Begam. Excellent rowing-boats are kept on both lakes. A drive to the Simla Kothi will well repay those who have time for it. The good shooting (big and small game) round Bhopal is not available without permission.

A branch line (broad gauge) of the G.I.P. Ry. runs from Bhopal (114 m.) to Ujjain (p. 153). 24 m. from Bhopal on this line is *Sehore*, the headquarters of the British Resident. The Indian infantry regiment which was stationed here has been withdrawn.

85 m. from Itarsi is *Sanchi*¹ (549 m. from Bombay, 408 m. from Delhi). There is a good State Rest House near the station, and fast trains can be stopped here by the courtesy of the Traffic Superintendent at Bombay. The bungalow is furnished, and a khansama is kept; but travellers intending to halt here should take food and bedding with them, and take permission from the Curator, Bhopal Museum, Bhopal.

The monuments at Sanchi constitute the largest and most important of several groups of Buddhist monuments situated in the neighbourhood of the ancient city of

¹ General Maisey's *Sanchi and its Remains* (1850-51), London, 1892, and a selection of photographs published under the orders of Sir Lepel Griffin, K.C.S.I., when Agent to the Governor-General for Central India, contain some illustrations of the tope and its sculptures. The best book is *A Guide to Sanchi*, by Sir John Marshall, Dr. Gl. of Archaeology, Calcutta, 1918, which contains a bibliography.

Vidisa (near the modern Bhilsa, which is the next stn. on the line), and often referred to as the "Bhilsa Topes." "Tope" is the Anglo-Indian corruption, derived from *thupa*, the Prakrit form of *stupa*. In contrast with other famous centres of Buddhism, such as Buddh-Gaya, Sarnath, or Sankisa, Sanchi had no connection with the life or acts of the Buddha; nevertheless its buildings are now the most magnificent and perfect examples of Buddhist architecture in India. Perhaps it was the interest taken in the spot by the great Emperor Asoka, who was to Buddhism what Constantine the Great was to Christianity, that accounts for the splendour of these structures. For one of the queens of Asoka, Devi by name, came from Vidisa; and it was on the hill of Sanchi, then known as Chetiyagiri, that a monastery is said to have been built for his son (or brother) Mahendra, the apostle of Ceylon. Whether this story is true or not, the fact remains that the earliest buildings date from the time of Asoka, and that that Emperor is commemorated here more than anywhere else in India.

The majority of the monuments which are now exposed to view have recently been excavated by Sir John Marshall on behalf of the Bhopal Darbar, and much has been done to rescue the remainder from the ruin into which they had fallen and to preserve their fabrics. Most of them are situated on a plateau on the hilltop, which about 1100 A.D. was enclosed by a circuit wall of solid stone construction. The buildings on this plateau dividethemselves naturally into four classes; firstly, the *stupas*, or, as the Burmese would call them, *pagodas*, which were erected either to enshrine the relics of the Buddha or of one of his saints, or to commemorate some specially holy spot; secondly, the memorial pillars set up by the Emperor Asoka or by other de-

votes in later ages; thirdly, the chapels or *chaitya* halls in which the faithful met for their prayers and the shrines of mediæval date in which images of the Buddha were set up; and fourthly, the monasteries or convents in which the monks and nuns lived side by side.

Of the *stupas* on the hilltop there are many scores, ranging in date from the 3rd century B.C. to the 12th century A.D., and varying in size from the Great Stupa, with its vast imposing dome, to miniature votive *stupas* no more than a foot in height. Each one of them was set up by the pious Buddhists as a work of merit which would help the donor a step nearer to his goal. As it now stands, the Great Stupa consists of an almost hemispherical dome truncated near the top and surrounded at its base by a lofty terrace. On the berm of this terrace and round about its foot were two procession paths (*pradakshina patha*); and each of these was enclosed by a balustrade of stone, while on the summit of the dome was a third balustrade surrounding the sacred umbrella which invariably crowned these monuments, and which was an emblem of the royalty of the Buddha—the Universal Monarch. But the crowning beauty of this monument is the richly carved gateways or *toranas* which front the entrances between the four quadrants of the rail and afford a striking contrast with the massive simplicity of the structure behind. All four gateways are of similar design—the work of carpenters rather than of stone masons—and the marvel is that erections of this kind, constructed on principles wholly unsuited to work in stone, should have survived in such remarkable preservation for nearly 2000 years. The best preserved is the Northern one, which retains most of its ornamental features. Each gateway

was composed of two square pillars surmounted by capitals, which in their turn supported a superstructure of three architraves with volute ends, ranged one above the other at intervals slightly in excess of their own height. The capitals were adorned with standing dwarfs or with the forefronts of lions or elephants set back to back in the Persepolitan fashion; and springing from the same abacus and acting as supports to the projecting ends of the lowest architrave, were Caryatid figures of graceful and pleasing outline. Other images of men and women, horsemen, elephants and lions were disposed between and above the architraves, while crowning and dominating all was the sacred wheel, so inseparably connected with Buddhism, flanked on either side by attendants and *triratna* emblems. For the rest, both pillars and superstructure were elaborately enriched with bas-reliefs illustrative of the *jataka* legends or scenes from the life of the Buddha, or of important events in the subsequent history of the Buddhist religion. The inscriptions carved here and there on the gateways record, like those on the balustrades, the names of pious individuals or of guilds who contributed to their erection, but say not a word of the scenes and figures delineated, the interpretation of which has been rendered all the more difficult by the practice, universal in the Early School of Indian Art, of never portraying the Buddha in bodily form, but of indicating his presence merely by some symbol, such as his footprints, or the throne whereon he sat, or the sacred tree associated with his enlightenment.

The reliefs are too numerous to be described at length, but those on the front façade of the **East Gateway** may be taken as typical of the rest. On the right pillar are represented, in six panels, the six

devalokas or stages of the Buddhist Paradise, their respective deities seated like mortal kings in each. On the left, starting from the base, is Bimbisara, with his royal cortège issuing from the city of Rajagriha on a visit to the Buddha, here symbolised by his empty throne. This visit took place after the conversion of Kasyapa, and in the panel above is depicted one of the miracles by which Buddha converted the Brahman ascetic and his disciples. The Nairanjana river is shown in flood with Kasyapa and two of his disciples hastening in a boat to the rescue of Buddha. In the lower part of the picture, Buddha, represented again by his throne, appears walking on the face of the waters, and in the foreground the figures of Kasyapa and his disciples are repeated, now on dry ground and doing homage to the Master. The third panel portrays the temple at Buddh-Gaya, built by Asoka, with the throne of Buddha within and spreading through its upper windows, the branches of the sacred tree. It is the illumination of Buddha; and to right and left of the temple are four figures in an attitude of prayer—perhaps the Guardian Kings of the four quarters; while ranged above in two tiers are groups of deities looking on in adoration from the celestial paradise. The scenes on the lintels are still more elaborate. On the lowest we see, in the centre, the temple and tree of Buddh-Gaya; to the left, a crowd of musicians and devotees with water vessels; to the right, a royal retinue and a king and queen descending from an elephant, and afterwards worshipping at the tree. This is the ceremonial visit which Asoka and his queen Tishyarakshita paid to the Bodhi tree, for the purpose of watering it and restoring its pristine beauty after the evil spell which the queen had cast upon it. The middle lintel is occupied with the scene of Buddha's departure

from Kapilavastu (*Mahabhinish-kramana*). To the left, is the city with wall and moat, and issuing from its gate the horse Kanthaka, his hoofs supported by Yakshas and accompanied by the divinities in attendance on the Buddha, and by Chandaka, his groom, who holds the umbrella symbolical of his Master's presence. In order to indicate the progress of the Prince, this group is repeated four times in succession towards the right of the relief, and then, at the parting of the ways, we see Chandaka and the horse sent back to Kapilavastu and the further journey of Buddha indicated by his footprints surmounted by the umbrella. Lastly, in the topmost lintel, are representations of the seven last Buddhas, the first and last symbolised by thrones beneath their appropriate Bodhi trees, the rest by the *stupas* which enshrined their relics.

Descriptions of the other gateways have been given as follows:—

North Gateway. Pillars surmounted by elephants and riders.

Right pillar—front face: Staircase and Buddhist railing. Inner face: Worship of tope and trees, monkey worshippers in one scene.

Left pillar—front face: Worship of tree, procession, scenes at fountain. Inner face: Cave temple, procession, tree worship. The *Architraves* bear scenes of processions with chariots, tree worship, and dagoba worship, and on the back of giants' and of hermits' huts. The floral patterns on the outer sides of these pillars are noticeable.

South Gateway.—Pillars surmounted by four lions.

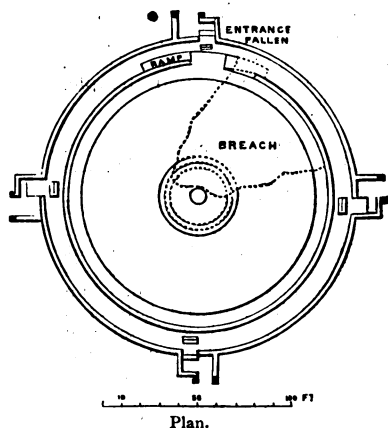
Left pillar—front: Casket scene in palace, worship of topes, siege, and relic procession. *Architraves*—Siege of a city. The right pillar of this gate has not been found.

Western Gateway.—Pillars surmounted by four dwarfs. *Right*

pillar—front: Trial of the bow, tree worship. Back: Worship of trees, one under an umbrella. *Left pillar*—front: Love scenes. Back: Hermits, tree festival, boat scene. *Architraves*—front: Procession with relic-casket, worship of symbol and trees. Back: Worship of topes and temple, triumphal procession.

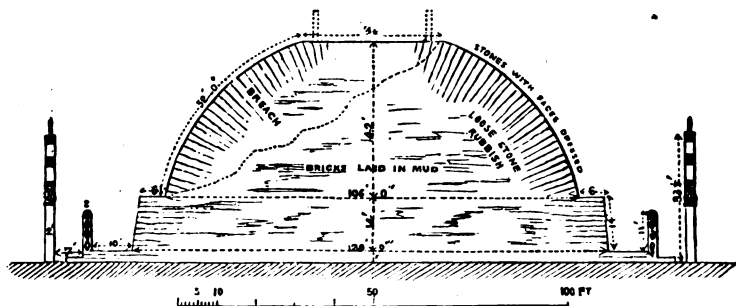
The **Great Stupa** or Tope, anciently called Chaitya giri, the Chapel Hill, and the ruined buildings surrounding it are situated on a level platform upon the top of the hill, which is about 350 ft. above the plain, and is approached by an easy path. The Tope with its rail and gateways were carefully and satisfactorily restored in 1883. They now form one of the most picturesque as well as one of the most interesting monuments of India. The dome, which is 42 ft. high and 106 ft. in diameter, rises from a plinth of 14 ft.; this is surmounted by a terraced path, reached by steps on the S. side, used by worshippers for the perambulation of the Tope and the relic buried in it. The Tope was crowned by an altar or pedestal surrounded by a rail, and must once have been nearly 100 ft. high, but these have not been restored; the pillars of the rail will be noticed on the ground at the N.E. side of the level platform. The Tope was enclosed below at a distance of 9½ ft. from it by a great railing slightly elliptical in shape, the diameter from W. to E. being 144 ft. and from N. to S. 151 ft. The railing is formed of pillars nearly 10 ft. high, carrying three bars, each 2 ft. 2 in. long, and separated by an interval of 3 in., let into them; a rounded coping stone surmounts the whole. At each cardinal point the railing is broken by a splendidly-decorated gateway 18 ft. high and 7 ft. broad, crowned by a superstructure of three stages of cross-beams, surmounted by a wheel and other

Buddhist emblems; facing each gateway, with its back to the wall of the plinth, is a large seated statue, probably representing the



four last Buddhas. The faces of the pillars of the gateways and of the cross-beams are elaborately carved with a series of most inter-

also to be thought that the balustrade around its base was approximately contemporary with the body of the building; and that the four gateways were erected in the course of the 2nd century B.C. This chronology, however, has now proved erroneous. The *stupa* which Asoka built was a structure of brick of about half the dimensions of the present *stupa*; and it was not until a century or more later that this original brick edifice was encased in stone and so brought to its present size, or that the balustrade was built around its base; and it was not until two centuries later that the four gateways were erected. The *Column* of Asoka referred to, though now shattered and in pieces, is well worthy of attention. On its broken stump the visitor can still trace out the edict written in the early Brahmi characters in which the Great Emperor exhorted the Buddhists to avoid schisms in their church; and the lions on the capital, with their swelling veins and tense muscular development,



Section. Great Stupa at Sanchi.

esting scenes, the principal of which have been described.

It used to be thought that the Great Stupa, as it stands, was erected at the same time as the column near the Southern Gateway—that is, during the reign of the Mauryan Emperor Asoka in the third century B.C., and it used

afford a fine example of what Græco-Persian art was achieving in India during the Maurya age.

Of the other *stupas* on this site two are specially remarkable. One of them (No. 3) stands about fifty yards to the North-east of the Great Stupa and is of almost identically the same design but

of smaller proportions. The dome and railings have recently been reconstructed, and a fair idea can be obtained of the ancient appearance of these monuments. It must, however, be borne in mind, that the surface of the monuments was once coated with stucco; that moulded in relief on this stucco were great garlands encircling the dome; and that gold and brilliant colours were used to pick out the decorations, if not to embellish the whole body of the building. It was in this *stupa* that the relics of the two famous disciples of the Buddha—Sariputra and Mahamogalana—were discovered, and in old days it must have been invested with peculiar sanctity. The chamber in which the relics were found was set in the centre of the structure and on a level with the top of the terrace. It contained two stone boxes, each bearing a short inscription: on one the word *Sariputasa* "of Sariputra," and on the other *Mahamogalanasa* "of Mahamogalana"; and inside each of the boxes was a casket of steatite containing some small fragments of human bone and a variety of beads of pearl, garnet, lapis-lazuli, crystal and amethyst.

The other *stupa* stands on a ledge of rock half-way down the Western side of the hill, and is of about the same size as the one just described. Here there is no gateway but, on the other hand, the railing around the base is almost intact and exhibits a variety of most interesting reliefs of the primitive Indian school, which present a striking contrast with the more advanced art of the gateway sculptures. What is especially remarkable about these reliefs is the extraordinarily crude treatment of living figures coupled with the no less extraordinary power of decorative design. The Indian artist has always possessed an innate aptitude for the handling of ornamental and particularly of floral pat-

terns, but it was not until Greek influence made itself felt in the North-west of India that he learnt how to portray the human figure. This is well illustrated by a comparison of the majority of the reliefs with a few of markedly superior execution, but lacking decorative power, which were added at a later date.

Of the shrines and monasteries the most noteworthy is the *chaitya* hall (Temple No. 18), which stands directly opposite the South entrance of the Great Stupa, and is specially interesting as one of the few examples of structural edifices of this type. But apart from this the visitor will find a wonderful charm in the classic-looking columns of the nave which transport the memory back to the pillared aisles of Paestum or of Athens; and he will not fail to mark the resemblance between its rounded apse and the apses of our own early Christian churches. The pillars and walls of this chapel that are now exposed to view date back no further than the 7th century of our era, and the sculptured jamb of the porch which lies prostrate in front of the door is more modern still by three or four centuries; but beneath the floor of the temple are the remains of three older chapels which, being constructed of wood, perished one after another before the existing edifice was built.

Another structure which recalls the classic temples of Greece, is a little shrine a few paces to the East of the one just described. It is a very unpretentious building, consisting of a simple flat-roofed chamber with a pillared porch in front; but, despite its modest size, it is very characteristic of the age of India's "Renaissance," when art and thought alike found expression in the same intellectuality, purposefulness, and logical definition as the art and thought of Greece did eight centuries earlier, and of Italy more than a thousand

years later. To the South of this shrine is a lofty plinth supporting the stumps of numerous octagonal columns. Originally it was an apsidal *chaitya* hall, with a superstructure of wood, but the superstructure was burnt down about the beginning of the Christian era and the plinth was then enlarged and stone substituted for wood. Many of the columns bear *ex-voto* inscriptions in the early Brahmi characters.

Of the fourth and last class of monuments on this site—namely the residence of monks and nuns—there are five examples, and they range in date from the 4th to the 11th century A.D. The earlier ones, which once occupied the Eastern side of the plateau, were built of wood and have perished or been buried beneath the foundations of later structures. Those which have survived are all built more or less on the plan of the ordinary domestic house of ancient India, with a square open court in the centre and ranges of two-storeyed chambers on the four sides. The most interesting, as well as the most modern among them, is the one occupying the highest part of the plateau towards the West. Here are the remains of several courts, surrounded by monastic cells, and on the Eastern side of what was evidently the principal court is a lofty shrine, containing an image of the Buddha, seated in that familiar attitude beneath the Bodhi tree, when touching the earth with his right hand he called on her to bear witness for him against Mara, the Evil One. Nine out of ten visitors imagine that this shrine is not Buddhist at all but Hindu, for its style is precisely that of a Hindu temple of the late mediæval period, and, were it not for the statue of the Buddha in the sanctum and some of the images in the niches round its outer walls, there would be nothing to indicate its Buddhist

character. The reason for this is that by the 11th century Buddhism had come deeply under the influence of Hinduism, and this influence made itself manifest in many new doctrines and ideas, which it absorbed from the parent religion, as well as in the more superficial matter of its architecture.

Close to the S. gate are the remains of a fine pillar nearly 40 ft. high, which carried a bell-shaped capital of four lions back to back; another stood near the Northern gate. On the platform will be observed many interesting sculptures and remains, including a huge stone bowl. To the S. of the Tope are the ruins of the only structural *chaitya* chapel known to exist; the colonnade of the nave and apsidal end can be clearly recognised.

To the W. a path descends steeply to the smaller tope near the foot of the hill; this also has a very interesting railing, 7½ ft. high, with carved medallions on the pillars and well-sculptured scenes on the gateways, and should be visited on the way back to the rest-house. In it were found relics of Kasyapa and Mogaliputra, well-known Buddhist apostles in the 3rd century B.C.

The country for some distance round is studded with Buddhist remains, but only at Sanchi itself are the remains abundant and well preserved. Sanchi is referred to by the Chinese pilgrim Fa-Hian in his description of the great kingdom of "Sha-chi."

Besides the group at Sanchi, there is at *Sonari*, 6 m. off, a group of eight topes, of which two are important structures in square courtyards, and in one of these numerous relics were found. At *Sadhara*, 3 m. farther, is a tope 101 ft. in diameter, which yielded no relics, and one 24 ft. in diameter, in which were found relics of Sariputra and others like those found at Sanchi. At *Besnagar*,

near Bhilsa (an ancient city extending from the junction of the Betwa and Bes rivers as far S. as Udayagiri Hill and E. to the Lohanggi Rock of Bhilsa), is a monolithic pillar of the date of 150 B.C. The inscription records that it was erected in honour of the god Vasudeva (Vishnu) by Heliodoros, a Greek ambassador of the Indo-Greek King Antialkidas of Taxila (p. 378) at the court of Bhagbhadrā, King of Vidisa (Bhilsa).

At *Bhojpur*, 7 m. from Sanchi, are thirty-seven topes, the largest 66 ft. in diameter, and in the next to it important relics were found. At *Andher*, 5 m. W. of Bhojpur, is a group of three small but very interesting topes. "So far as can be at present ascertained," says Fergusson,¹ "there seems no reason for assuming that any of them are earlier than the age of Asoka, 250 B.C., nor is it probable that any of them can be of later date than, say, the 1st century before our era."

91 m. *Bhilsa* station. A fortified town in the Gwalior State. In the fort lies an old gun, 19½ ft. in length, with a bore of 10 in., said to have been made by order of the Emperor Jahangir. Bhilsa is now chiefly noteworthy as a famous place of Hindu pilgrimage to the temples, picturesquely situated in the bed of the Betwa river, and as giving its name to the remarkable and interesting series of Buddhist topes found in its neighbourhood.² The principal of these is at Sanchi.

120 m. from Itarsi is *Bareth* station. 4 m. E. by metalled road in the village of Udaipur

¹ *Indian Architecture*, 1, 71.

² These are described in General Cunningham's *Bhilsa Topes*, London, 1854; also in Fergusson's *Tree and Serpent Worship*, 2nd Ed., London 1873. One half of this book and forty-five of its plates, besides woodcuts, are devoted to the illustration of the Great Tope. Casts of the E. gateway are in the South Kensington and Edinburgh Museums.

(in the Gwalior State) is a magnificent temple of Siva known as Udayeswar or Nilkhanterwar, which dates from the 11th century. The carving on every part of this temple is exceptionally fine.

143 m. from Itarsi and 607 m. from Bombay is *Bina* junction (R.). 8 m. from Bina, at Eran, are some Jain and Buddhist ruins, including two monolithic pillars.

From Bina a line runs N.W. to 73 m. Goona, 147 m. Baran, and 188 m. Kotah, where it joins the direct route between Bombay and Delhi, controlled by the B.B.C.I. Ry. (Route 12).

47 m. from Bina junction on a branch line (165 m.) running S.E. to Katri jn. (p. 48) is *Saugor* (D.B.). Principal town and headquarters of Saugor district, Central Provinces, and a military Cantonment. Population 39,317. Saugor stands 1940 ft. above sea-level, on the borders of a fine lake (*Sagar*), nearly 1 m. broad, from which it derives its name. The lake is said to be an ancient Banjara work, but the present city dates only from the end of the 17th century, and owes its rise to a Bundela Raja, who built a small fort on the site of the present structure in 1660, and founded a village called Parkota, now a quarter of the modern town. During the Mutiny of 1857 the whole of the surrounding country was in the possession of the rebels, but the town and fort were held by the English for eight months, until the arrival of Sir Hugh Rose.

Saugor town is well built, with wide streets. The large bathing-ghats on the banks of the lake, for the most part surrounded with Hindu temples, add much to its appearance.

The existing *Fort* at Saugor was completed by the Mahrattas about 1780. It stands on a height N.W. of the lake, commanding the whole

of the city and surrounding country, and consists of twenty round towers, varying from 20 ft. to 40 ft. in height, connected by thick curtain walls. It encloses a space of 6 acres, for the most part covered with old Mahratta buildings two storeys high. In 1862 an unhealthy swamp lying N.E. of the lake, which cut off the quarter called Gopalganj from the rest of the city, was converted into a large garden with numerous drives and a piece of ornamental water.

There is an Equitation School, originally started in 1910; the course is from September to April. An Indian Regt. occupies the old Cavalry Lines.

The Police Officers' Training School, at which sub-inspectors of police are trained, was opened in 1906, and is located in the fort.

85 m. on this line is **Damoh** (D.B.), hdqrs. of a district.

Proceeding N. by the main line from Bina Jn., 172 m. from Itarsi, is **Jakhlaun** stn. Unmetalled road, 12 m. to **Deogarh**. Finely situated on a bluff overlooking the Betwa are the remains of temples dating back to the times of Chandra Gupta and Asoka.

182 m. from Itarsi is **Lalitpur** station (D.B.), 57 m. from Jhansi. It is the headquarters of the Lalitpur subdivision of the Jhansi District. Pop. 11,908.

21 m. W. of Lalitpur is **Chanderi** in the Gwalior State, which was a place of considerable importance under the Sultans of Mandu. The road for the first 13 m., as far as Rajghat on the Betwa River, is in British territory and is motorable only from November to June (R.H. on left bank of river). Between Rajghat and Chanderi the road, which is now in the Gwalior State, is metalled; there is rather a steep ascent for about $1\frac{1}{2}$ m. near Chanderi. The road continues S.

(24 m.) to Mungaoli station, 20 m. from Bina junction, on the Bina-Kotah branch line. State D.Bs. at Chanderi and Mungaoli (travellers must make their own arrangements about food). Chanderi is picturesquely situated on a great bay of hills overlooking the valley of the Betwa, and is approached by narrow passes which rendered it in former days a place of considerable importance. The old Hindu town is 8 m. N. of the modern town: it is deserted and hidden in thick jungle, which makes an excellent hunting-ground. The ruins of a few Jain temples of about the 10th century A.D. contain some fine sculpture. The modern town is widely known for its muslins and gold brocades. Under the Sultans of Mandu, when it was at the height of its prosperity, it seems to have covered an extensive area: for there are numerous remains of palaces, sarais, wells, mosques and tombs, in the Mandu variety of the Pathan style of architecture. The hill fort, which is deserted and neglected, overlooks the town. The Koshak Mahal, an imposing Muhammadan palace, is a ruin, but is maintained as an archaeological monument. There are some rock-cut Jain statues in the Khandar hill. Three palaces on the outskirts, built by the Bundela Rajas, have been repaired and are used as shooting-boxes. (A guide to Chanderi is published by the Archaeological Dept. of the Gwalior State and can be obtained locally.)

207 m. **Talbahat** station. Pop. 5750. There is an Inspection House. A picturesque town with a fine old fort overlooking a large piece of artificial water covering more than 1 sq. m. The water is retained by damming the streams that flow through a rocky barrier about 800 ft. high.

238 m. from Itarsi is **Jhansi** junction station (R., D.B.), a

centre of the G.I.P. Railway system. The main line runs N. to Gwalior, 61 m., Agra, 133 m., and Delhi, 255 m., one branch N.E. to Cawnpore, 137 m., and Lucknow, 181 m., and another E. through Banda, 119 m., to Manikpur junction (p. 48), 181 m., where it connects with the Bombay-Calcutta mail route, *via* Jubbulpore.

By road Jhansi to Saugor (D.B.) is 122 m., a good motoring road. The Betwa River is crossed at 24 m. from Jhansi on a causeway in the hot weather, at other times by a ferry. Jhansi to Banda is 122 m., *via* Nowgong 65 m. Jhansi to Shivpuri or Sipri (W.) is 61 m. by a metalled road. Shivpuri (p. 189) is the summer hdqrs. of the Gwalior State administration. Jhansi to Gwalior is 61 m., to Dholpur 103 m., to Agra 138 m. Suitable for motors. Petrol can be obtained from shops in the Sadr Bazar and Civil Lines.

Jhansi (lat. 25° 27', long. 78° 37', pop. 132,900) is the hdqrs. of an infantry brigade area in the Eastern Command, and one of the main halting-places for troops proceeding up country. It is well worthy of a visit on account of its fort, which the British Government exchanged in 1885 with Maharaja Scindia for Gwalior; and on account of the various places of interest—Datia, (p. 179), Orchha and Barwa-Sagar (p. 176)—which can be reached from it.

The Province of **Bundelkhand**, in which Jhansi is situated, was for ages one of the most turbulent and difficult to manage in all India. In the early part of the 17th century the Orchha State was governed by Bir Singh Deo (1605-26), the most famous of its Chiefs, who built the fort of Jhansi, 8 m. to the N. of his capital, which is situated on an island in the Betwa river. He incurred the heavy displeasure of Akbar by the murder of Abul Fazl,

the Emperor's favourite Minister and historian, at the instigation of Prince Salim, afterwards known as the Emperor Jahangir. A force was accordingly sent against him in 1602; the country was ravaged and devastated, but Bir Singh himself contrived to escape. On the accession of his patron, Salim, in 1605, he rose into great favour; but when, on the death of that Emperor in 1627, Shah Jahan mounted the throne, Bir Singh revolted. His rebellion was unsuccessful, and although he was permitted to keep possession of his dominions, he never regained all his former power and independence. During the troubled times which succeeded Orchha was sometimes in the hands of the Muhammadans and sometimes fell under the power of Bundela Chieftains. In 1732 Chatar Sal found it expedient to call in the aid of the Mahrattas, who were then invading the Central Provinces under their Peshwa Baji Rao I. They came to his assistance with their accustomed promptitude, and were rewarded on the Chief's death, in 1734, by a bequest of one-third of his dominions. The territory so granted included portions of the modern division of Jhansi, but not the existing district itself. In 1742, however, the Mahrattas found a pretext for attacking the Orchha State and annexing it amongst other territories. Their General founded the city of Jhansi, and peopled it with the inhabitants of Orchha.

The district remained under the rule of the Peshwas until 1817, when their rights passed to the E.I. Company. Under British protection, successive Rajas ruled until their folly and incompetency ruined the country, and, when the dynasty died out on the death of Gangadhar Rao, in 1853, their territories lapsed to the British Government. The Jhansi State, with Jalaun and Chanderi districts,

were then formed into a Superintendency, while a pension of £6000 a year was granted to the Rani, or widow, of the late Raja Rao. The Rani, Lakshmi Rai, however, considered herself aggrieved, both because she was not allowed to adopt an heir, and also because the slaughter of cattle was permitted in the Jhansi territory.

The events of 1857, accordingly, found Jhansi ripe for rebellion. In May it was known that the troops were disaffected, and on the 5th of June a few men of the 12th Bengal Infantry seized the fort, containing the treasure and magazine. Many European officers were shot the same day. The remainder, who had taken refuge in a fort, capitulated a few days after, and were massacred with their families to the number of sixty-six persons, in spite of a promise of protection sworn on the Koran and Ganges water. The Rani then attempted to seize the supreme authority, but the usual quarrels arose between the rebels, during which the Orchha leaders laid siege to Jhansi and plundered the country mercilessly. On the 4th of April 1858 the fort and town were captured by Sir Hugh Rose, who marched on to Kalpi without being able to leave a garrison at Jhansi. After his departure the rebellion broke out afresh, only the Gursarai Chieftain in the N. remaining faithful to the British cause. On the 11th August a flying column under Colonel Liddell cleared out the rebels from Mau (40 m. from Jhansi), and, after a series of sharp contests with various guerrilla leaders, the work of reorganisation was fairly set on foot in November. The Rani herself had previously fled with Tantia Topi, and finally fell in a battle at the foot of the rock fortress of Gwalior. Much sympathy has been expended upon this lady, especially by Col. Malleon, and she may have deserved the praise of Sir Hugh Rose, who

described her as one of the bravest of the military leaders of the rebels; but she is answerable for a massacre of English men, women and children which was in every way as deliberate and revolting as the slaughter at Cawnpore.

The capture of Jhansi by Sir Hugh Rose's force in 1858 must always rank as a memorable feat of arms. The siege lasted from 21st March till 4th April 1858, and cost 343 in killed and wounded, of whom 36 were officers. The engineers lost four officers leading the attacking parties at the final escalade. It was the hottest season of the year, and the British force, which consisted of one incomplete division, toiled and fought without the slightest shelter from the sun. The General had no plan, or even correct description, of the fort and city, and several days were spent in long and repeated reconnaissances. The fort presented a formidable appearance. It was built (wrote Sir Hugh Rose) on a huge granite rock: the walls were of solid masonry, 16 to 20 ft. thick; the outworks were extensive and elaborate and of the same construction, with front and flanking embrasures for artillery fire, and loopholes, of which in some places there were five tiers, for musketry. Guns placed on the high towers commanded the surrounding country. Except on the W. and part of the S., the fort abutted on the city, which was about $4\frac{1}{2}$ m. in circumference and was encircled by a massive fortified wall, from 6 to 12 ft. thick, and varying in height from 18 to 30 ft., with numerous floating bastions armed as batteries with ordnance and loopholes, and with a banquette for infantry. The steepness of the rock afforded protection from the W., and three flanking bastions defended the E. face of the fort. The most important of these was a high mound or mamelon, fortified by a strong circular bastion for

five guns, round part of which was drawn a ditch, 12 ft. deep and 15 ft. broad, of solid masonry. The garrison consisted of 11,000 rebel sepoys and local levies, and their casualties amounted to 5000. In the quarters of the Rani's bodyguard in the city there was found a silken Union Jack which Lord William Bentinck had given to the grandfather of the Rani's husband, as a reward for his loyalty. It was promptly hoisted on the palace after the assault.

The fort has been modernised and supplied with strong armament. The views from the top and from the road round the ramparts are very extensive. A crag to the N.E. of the railway station, still called "Retribution Hill," marks the last stand made by the mutineers.

The old civil station (**Jhansi Nauabad**) attached to Jhansi before 1861 remains the headquarters of the district.

- (1) *Jhansi to Cawnpore* (137 m.) and *Lucknow* (181 m.) direct by G.I.P. Ry. (broad-gauge branch line).

Between Jhansi and Cawnpore the country abounds in black buck. Numerous old fortified villages are seen from the railway train. Jhansi to Cawnpore *viâ* Hamirpur is 197 m. by road.

14 m. from Jhansi and 252 m. from Itarsi is **Paricha** stn., on the Cawnpore road: the head works of the Betwa Canal 71 m. long. There is a magnificent masonry dam, which holds up the water of the Betwa river. The supply was found insufficient and a second dam was constructed in 1908 at Dhukwan, 20 m. farther up the river. There is a metalled road to Dhukwan from Jhansi (22 m.). At both places there are finely situated bungalows. Permission to occupy them may be obtained

from the Executive Engineer (Irrigation) Jhansi. The works are interesting as fine examples of engineering skill.

71 m. from Jhansi and 309 m. from Itarsi is **Orai** station (R., D.B., food available). A thriving place of 9191 inhabitants, and the headquarters of the Jalaun district.

92 m. from Jhansi and 330 m. from Itarsi is **Kalpi** station (D.B. 2½ m. distant. Permission to occupy must be obtained from the District Engineer, P.W.D., Orai: visitors should arrange for their own food and servants). The town is situated amongst deep rugged ravines on the right bank of the Jumna, which is here crossed by a fine iron girder bridge of ten spans of 250 ft. The piers are about 60 ft. in height, built on wells sunk 100 ft. below low water level. Motorists can cross the river between October and June by a bridge of boats; at other times by a ferry. Pop. 10,061.

Tradition says that the town was founded by Basdeo or Vasudeva, who ruled at Kamba from 330 to 400 A.D. During the Mughal period Kalpi played a large part in the annals of this part of India. It was the birthplace of Mahesh Das, afterwards famous as Raja Birbal, the companion of Akbar. After the Mahrattas interfered in the affairs of Bundelkhand the headquarters of their Government were fixed at Kalpi. At the time of the British occupation of Bundelkhand, in 1803, Nana Gobind Rao seized upon the town. The British besieged it in December of that year, and, after a few hours' resistance, it surrendered. Kalpi was then included in the territory granted to Raja Himmat Bahadur, on whose death, in 1804, it once more lapsed to Government. It was next handed over to Gobind Rao, who exchanged it two years later for villages farther to the W.

Since that time Kalpi has remained a British possession. After the capture of Jhansi and the rout of the mutineers at Kunch, they fell back on Kalpi, which throughout the previous operations they had made their principal arsenal. Here, on 22nd May 1858, Sir Hugh Rose (Lord Strathnairn) again defeated a force of about 12,000 under the Rani of Jhansi, the Rao Sahib, and the Nawab of Banda, who then fled to Gwalior.

Kalpi was famous for its cotton in the days of the E.I. Co.; now the export of clarified butter and grains is important. The Western outskirts of the town contain a large number of ruins, notably the tomb of the Lodi period called the *84 Domes*, and twelve other handsome mausolea. The buildings of the old commercial agency crown high ground near the river-bank, but are now deserted. A ruined fort, of which practically nothing now remains, was situated on the steep bank of the Jumna above the town, and overhung the bathing embankment, which has a picturesque temple, and is reached by a long flight of steps. In the heart of the town is a curious monument, a big cylindrical tower on which is sculptured in huge proportions the figure of Ravana. It was erected in 1895 by a lawyer of Kalpi, who imagined himself to be an incarnation of this mythological personage.

137 m. from Jhansi and 375 m. from Itarsi is **Cawnpore** junction station (p. 438). 44 m. farther on, by E.I. Ry. *via* Unao is **Lucknow** junction (Route 22).

(2) *Jhansi to Manikpur*, 181 m., by G.I.P. Rly. broad-gauge branch line.

7 m. from Jhansi is **Orchha** station, at the old capital of the Orchha State, the oldest and highest in rank of all the Bundela

Principalities, and the only one of them that was not held in subjection by the Peshwa. It is built on both banks of the Betwa. There is an imposing fortress, connected by a masonry bridge with the rest of the town, containing in the S.W. corner of the city, within the walls, the magnificent 17th-century palace, the residence of Bir Singh Deo (p. 173), and a palace named after the Emperor Jahangir. The Chhatttri of Bir Singh Deo (1605-27) is also fine. The area of the State is 2079 sq. m., with a pop. of 284,948 and an annual revenue of 10 lakhs. The Maharaja, H.H. Manindra Sawai Sir Pratap Singh Bahadur, G.C.S.I., was born in 1854 and succeeded in 1874.

Tikamgarh (Tehri), the present capital, in the S.W. corner of the State, is about 60 m. S. from Orchha, with which it is connected by road; also with Lalitpur Railway station on the W. and Mau-Ranipur Railway Station on N.E. by metalled roads, 36 m. and 42 m. respectively.

14 m. from Jhansi is **Barwa-Sagar** station (D.B.). The town is picturesquely situated at the foot of a rocky ridge on the shore of the Barwa-Sagar lake, an artificial sheet of water formed by a masonry embankment $\frac{1}{2}$ m. in length, constructed by Udot Singh, Raja of Orchha, between 1705-37, and containing two craggy, wooded islets. Below, a tract of land, extending over 4 m., is thickly planted with mango and other trees, many of great age and enormous size. N.W. of the town rises a fine old castle, also built by Udot Singh, but now uninhabited. 3 m. W. stand the remains of an old Chandel temple, built of solid blocks of stone, carved with the figures of Hindu gods, much defaced by Musalmans.

40 m. **Mau Ranipur** station (D.B. $\frac{1}{2}$ m., and Inspection House). **Mau Ranipur** (pop. 12,973) is, next

to Jhansi, the principal commercial town of Jhansi district. Its buildings are remarkably picturesque, in the style peculiar to Bundelkhand, with deep eaves between the first and second storeys and hanging balconies of unusual beauty. Trees line many of the streets, and handsome temples ornament the town, the principal being that of the Jains, with two solid spires and several cupolas. An old brick-built fort with bastions adjoins the bazar, and contains the public offices.

53 m. from Jhansi is **Harpalpur** station (R.R.), for **Nowgong** Cantonment, 19 m. distant (pop. 7141), where there are a D.B. for travellers and a Military Works Inspection Bungalow for military officers, both in the Cantonment; also a Circuit House in the Civil Lines. Nowgong was at one time, next to that of Jhansi, the chief military station of Bundelkhand. A detachment only of the Indian infantry regiment at Jhansi is now stationed here. In 1857 the troops in it mutinied on the 10th June, and the Europeans who were not murdered were compelled to leave the place, and made their way with numerous losses on the road to Kalinjar, and thence to Banda or Allahabad. Motor service, Harpalpur — Nowgong—Chhatarpur. Harpalpur is the nearest station for Khajraho (p. 178).

67 m. **Jaitpur** (Belatal station). The town was formerly the capital of the State of the same name, which was resumed by Lord Dalhousie in 1849 on the death of the last Raja without issue. It is picturesquely situated on the W. of a large tank, called Belatal, said to have been built by Bala Varma, a Chandel ruler of Mahoba : it has a circumference of nearly 9 m. and is of considerable depth. Two irrigation canals are run from it. A tank of about the same size, called the Majhgawan Tank, was

excavated in 1914 some 6 m. S. of Belatal, and serves to irrigate the S.W. portion of Kulpahar *tahsil*. On the W. edge of Belatal runs a chain of several low hills; a fort is built on the top and along the slopes. The town of Jaitpur and fort are ascribed to Jagatraj, son of Chatarsal, the Bundela Chief who died in 1731. There is a temple called the Dhamsa, near the railway station, superintended by a mohunt. The town is slowly decaying and is now unimportant. A bungalow is available for travellers at Jaitpur by permission of the Collector of Hamirpur.

86 m. from Jhansi is **Mahoba**. (District Board and Survey Bungalows can be used with permission of the Collector of Hamirpur.)

Mahoba is believed to have existed from the most remote times and to have borne different names in the successive cycles through which the world has passed. Its name in the present evil age Kala-Yug is Mahoba, said to be derived from a great sacrifice (Mahot-Sava) performed by its reputed founder, Chandra Varma, the Chandel Raja, about 800 A.D. The town stands on the edge of Madan Sagar lake, named after the great Chief Madana Varma. There are three distinct portions of the town : the old fort, N. of a low hill; the inner fort, on the top of the hill; and the Dariba, or "pan" shop, on the S.

Architectural antiquities of the Chandel period abound throughout the neighbourhood. The Ram Kund marks the place where Chandra Varma, founder of the dynasty, died; and the tank is believed to be a reservoir into which the united waters of all holy streams pour themselves. The fort, now almost entirely in ruins, commands a beautiful view over the hills and lakes. The temple of Mania Deva, partially renovated, has in front of its entrance a stone pillar inscribed to Madana Varma. Outside this temple is a stone pillar known as

the "Dewal dip," or "Alha ki Gilli," the staff of Alha. Passing further along we come to the *dargah* of Pir Mubarak Shah: this is built entirely of Hindu materials. Of the lakes, confined by magnificent masonry dams, two have greatly silted up, but the Kirat Sagar and Madan Sagar, works of the 11th and 12th centuries, still remain deep and clear sheets of water. The shores of the lakes and the islands in their midst are thickly covered with ruined temples, monstrous figures carved out of the solid rock, pillars, broken sculpture and other early remains, while on the hills above stand the summer-houses of the early Rajas, and shrines overhang the edge. Relics of Jain temples and Buddhist inscriptions also occur. The existing monuments of Muhammadan date include the tomb of Jalhan Khan, constructed from the fragments of a Saivite temple, and a mosque, also built of Chandel materials. Besides these are broken Jain statues lying about. Buddhist statues are also found. On a hill adjoining the S.E. bank of Madan Sagar there are twenty-four rock-hewn images of the "Tirthankaras," dated Sambat 1206 (1149 A.D.). (See *Six Sculptures from Mahoba*, No. 8. Memoirs, Arch. Surv. of India, 1921, by K. N. Dikshit).

The motor road from Jhansi through Nowgong (65 m.) skirts Mahoba (102 m.)—no European shops or supplies—and reaches Banda at 132 m.

Khajraho (Chhatarpur State, Central India) is about 60. m., S.E. from Harpalpur (G.I.P. Railway) *via* Nowgong (D.B.) and Chhatarpur (D.B.) and about 36 m. from Mahoba. There is a good metalled road from Harpalpur up to Khajraho; but the road from Mahoba is partly unmetalled. Bazar tongas are available from Nowgong and Chhatarpur at about Rs.15 and Rs.10 respectively,

but only country-carts can be had from Mahoba for Rs.5 to Rs.6. Motors and lorries available from Harpalpur: fare, Rs.3 and Rs.1½ per seat to Nowgong; about the same from Nowgong to Chhatarpur; from Nowgong to Khajraho, by arrangement. The stn. master at Harpalpur, if advised in time, will arrange for a car to meet the train.

Khajraho was formerly the capital of the old kingdom of Jujhoti which practically corresponds with the modern Bundelkhand. Its present importance lies in its magnificent series of beautiful temples, which are probably the best of their type in Northern India. Hiuen Tsang mentions it in the 7th century, and General Cunningham ascribes the graceful pillared porch of the Ghantai Temple to the same period. A high mound probably covers the ruins of a Buddhist monastery. Close by is a colossal statue of the Buddha. There are thirty temples¹ in the group which, with three exceptions, were all built between 950 and 1050 A.D. Several of these have been repaired at the joint cost of the State and the Govt. of India. A museum has been added to them. In the *Kandarya Mahadeo* temple, which is a Saivite shrine, alone, Cunningham counted over 800 statues, half life-size, and eight sculptured elephants of like proportions. The *Temple of Ramachandra*, which is a Vaishnavite place of worship, bears an inscription dating from 954 A.D. The third great monument at Khajraho is the *Jinanatha*, a Jain temple distinguished by its graceful pillars and profusion of sculpture. Another Jain temple, the *Chaonsat Jogini*, or temple of the sixty-four female demons, is surrounded by as many cells; it is believed to be the oldest yet discovered. An annual fair is held here in March or April.

¹ Fergusson's *Indian Architecture*, 2, 49-54, 95-96, 103, 140-143.

113 m. **Khairada**; branch line (79 m.) through Hamirpur Road to Cawnpore (p. 438).

119 m. from Jhansi is **Banda** station (R., D.B.) (pop. 20,562), a municipal town and the headquarters of the Banda District. It stands on an undulating plain, 1 m. E. of the right bank of the Ken river. "There is a pontoon bridge here in the dry season and a ferry in the rains, when special arrangements must be made for crossing, as the ordinary ferry-boat has insufficient accommodation for motors. In the dry season the approaches on both sides and the roadway over the pontoon bridge require careful driving." (*Motor Guide*, U.P.).

The modern town derived its importance from the residence of the Nawab of Banda, and from its position as a cotton mart. Since the removal of the Nawab in 1858, owing to his disloyalty during the Mutiny, the town has declined. There are five Jain temples, some of which possess fair architectural merit. The three characteristics of Banda Dt. are its liability to agricultural calamity, its trade in the cutting and polishing of precious stones, and its shooting facilities for panther, bear and *sambhar*.

35 m. S. of Banda, and 24 m. S.E. of Atarra station (139 m. from Jhansi) is the famous hill fort of **Kalinjar**, at which the Emperor Sher Shah is said to have met his death (1545). It contains many temples and antiquities, some dating back to the 12th century. It is still a favourite resort for pilgrims. It is necessary to use an *ekka* or country-cart for the last 13 miles of the trip, while that to the Ajaigarh fort, 16 m. farther, can be accomplished only on foot or on horseback. There are rest-houses at both places.

157 m. from Jhansi is **Chitrakot** stn., a celebrated place of pil-

grimage where Sita, Rama and Lakshman are said to have lived after their exile from Ajudhia.

162 m. from Jhansi is **Karwi Tarahwan** (pop. 10,050). In 1805 the town formed a Cantonment for British troops, and in 1829 it became the principal residence of the Peshwa's representative, who lived in almost regal state, and built several beautiful temples and wells. Numerous traders from the Deccan were thus attracted to Karwi. During the Mutiny Narayan Rao assumed the government, and retained his independence for eight months. Since the Mutiny the prosperity of Karwi has gradually declined. There is a fine temple and tank with a masonry well attached, known as the Ganesh Bagh, built by Vinayak Rao in 1837.

181 m. from Jhansi and 782 m. from Bombay is **Manikpur** junction (p. 48), on the G.I.P. Ry. Mail route from Bombay to Calcutta, *via* Jubbulpore (Route 2).

(3) *Jhansi to Agra*, 133 m., and *Delhi*, 255 m., *via* **Datia**, **Gwalior**, and **Dholpur**, by G.I.P. Ry. main line.

254 m. from Itarsi on the G.I.P. Ry. main line to Delhi and 16 m. from Jhansi, is **Datia** station. The town has 16,000 inhabitants, and is the residence of the Chief of the Datia State, H.H. Maharaja Lokendra Sir Govind Singh Bahadur, K.C.S.I., who was born in 1886 and succeeded in 1907. The State covers an area of 911 sq. m., with a pop. of 146,659, and an annual revenue of 19 lakhs. Datia stands on a rocky height surrounded by a good stone wall, and is full of picturesque houses and palaces. The Maharaja's present residence stands within the town, surrounded by a pretty garden. To the W. of the town, within the

walls, is a very large palace of great architectural beauty, now untenanted.¹

261 m. Sonagir station. 2 m. off and visible from the railway are several Jain temples of modern date, forming an extremely picturesque group, well worth a visit.

299 m. from Itarsi is **GWALIOR** station, 763 m. from Bombay, 194 m. from Delhi by the G.I.P. Railway (R., D.B.), the capital of Maharaja Scindia. The present Chief, H.H. Maharaja George Juvaji Rao Scindia Alijah Bahadur, was born 1916 and succeeded his father, Maharaja Sir Madhava Rao Scindia in 1925. He is entitled to a salute of 21 guns. Of the Scindia family the most remarkable have been Ranoji, the founder (d. 1750), Mahdaji (d. 1794), his grand-nephew Daulat Rao (d. 1827), Jayaji Rao (1843-1886), and the late Maharaja (1886-1925), who was, throughout his reign, the foremost of Indian rulers. The area of the State, which is in direct relation with the Government of India through a Resident, is 26,383 sq. m., the population 3,195,476 (1921), and the revenue 214 lakhs. This progressive State expended between 1898 and 1922 a sum of Rs. 25½ crores on works designed to irrigate 338,000 acres.

Gwalior is famous for its fort, one of the most ancient and renowned strongholds in India. For many years a strong brigade of British troops was maintained at *Morar*, a few m. E. of the fort, which was garrisoned by British troops from 1858 to 1886, when it was restored to the Maharaja's custody, and with Morar was made over to him in exchange for Jhansi.

The ry. stn. is about 1½ m. from Lashkar or the new town (p. 183) and about 3 m. from Morar (tongas). The only hotel suitable

for European visitors is the Grand Hotel (opp. the rly. stn.), which was built by the late Maharaja and contains 100 rooms.

History.

General Cunningham, in vol. 2 of the *Reports of the Archaeological Survey*, gives a valuable account of Gwalior. It is believed to have been founded in the 6th century A.D., when Toramana, a tributary Prince under the Guptas, rebelled, and became sovereign of all the territory between the Jumna and Narbada. In the reign of his son the Sun Temple was built and the Suraj Kund excavated; and Gwalior was founded by Suraj Sen, a Kachhwaha Chief, who was a leper, and coming when hunting to the Gopagiri Hill, on which the fort stands, received a drink of water from the hermit Gwalipa, which cured him of his leprosy. Suraj Sen also received a new name, Suhan Pal, from the hermit, with a promise that his descendants should reign as long as they were called Pal. Eighty-three reigned accordingly; but Tej Karan, having discarded the name of Pal, lost his kingdom. To this dynasty seven Parihara Princes succeeded, who ruled for 103 years—till 1232 A.D., when Gwalior was taken by Altamsh in the 21st year of the reign of Sarang Deo.

The capture of Gwalior by Altamsh was commemorated in an inscription placed over the gate of the Arwahi, and the Emperor Babar states that he saw it, and the date was 630 A.H. = 1232 A.D. From 1232 onwards the Emperors of Delhi used Gwalior as a State prison. In 1375 A.D. the Tomar Chief, Bir Singh Deo, declared himself independent, and founded the Tomar dynasty of Gwalior.

Early in the 15th century the Gwalior Chiefs paid tribute to Khizr Khan of Delhi, and in 1424 Gwalior, being besieged by Hosh-

¹ Fergusson's *Indian Architecture*, 2, 173.

ang Shah of Malwa, was delivered by Mubarak Shah of Delhi. In 1425 Dongar Singh commenced the great rock sculptures at Gwalior, and his son Kirti Singh, 1454, completed them. In 1465 Husain Shah, the Sharki king of Jaunpur, besieged Gwalior, and obliged it to pay tribute. Man Singh (1486-1516) acknowledged the supremacy of Bahlol Lodi and of Sikandar Lodi of Delhi; the latter in 1505 marched against Gwalior, but fell into an ambushade, and was repulsed with great loss. In 1516 he made great preparations at Agra for the conquest of Gwalior, but died before he could accomplish his purpose. Ibrahim Lodi sent an army of 30,000 horse, 300 elephants, and other troops, against Gwalior, and a few days after they reached that place Man Singh died. He was the greatest of the Tomar Princes of Gwalior, and constructed many useful works, amongst others the great tank to the N.W. of Gwalior, called the *Moti Jhil*. His palace in the fort is the noblest specimen of Hindu domestic architecture in N. India. After Man Singh's death his son Vikramaditya sustained the siege for a year, but at last surrendered, and was sent to Agra, where he became the friend of the Emperor, and died fighting at his side against Babar on the field of Panipat in 1526 A.D. His widows, according to tradition, presented the Koh-i-nur to Prince Humayun in return for the protection accorded by him to them.

Babar sent Rahimdad with an army to Gwalior, which he took by a stratagem, suggested by the holy Muhammad Ghaus. In 1542 Abul-Kasim, Governor of Gwalior, surrendered his fortress to Sher Shah. In 1545 Salim, son of Sher, brought his treasure from Chunar to Gwalior, and in 1553 died at the latter place. Rana Sah, son of Vikram, tried to seize Gwalior, and fought a great battle there, which lasted for three days,

with Akbar's troops, but was defeated, and the fortress remained in the hands of the Mughals till the fall of their power. In 1761 Gwalior was taken by Bhim Singh, the Jat Rana of Gohad,¹ and in 1780 captured by Major Popham from the Mahrattas, into whose hands it had fallen, and restored to the Rana of Gohad. It was again taken by the Mahrattas under Mahdaji Scindia² in 1784, and once more captured by the English under Colonel White in 1803, and restored to Scindia in 1805. In 1844, after the battles of Maharajpur and Panniar, it was a third time occupied by the British.

At the time of the Mutiny Maharaja Jayaji Rao Scindia had, besides 10,000 troops of his own, a contingent of two regiments of Irregular Cavalry—1158 men of all ranks—seven regiments of Infantry—aggregating 6412 men—and 26 guns, with 748 Artillerymen. This force was officered by Englishmen, and the men were thoroughly drilled and disciplined, and were, in fact, excellent soldiers, as they proved by defeating and almost driving into the river General Windham's brigade at Cawnpore.

The Maharaja and his Minister, Sir Dinkar Rao, remained staunch; but the Contingent troops mutinied on Sunday, 14th June, and murdered their English officers and a number of women and children; and those who escaped, or had previously taken refuge in the Maharaja's palace, had to be removed to Dholpur, and thence to Agra. After this Gwalior remained quiet for a time; but later the Contingent troops joined Tantia Topi at Cawnpore.

On the 22nd May 1858 an im-

¹ Now represented by the Maharaj Rana of Dholpur (p. 190).

² This Prince was wounded at the Battle of Panipat (p. 329), where one of his brothers was killed. Two more brothers fell in other engagements.

portant battle was fought in front of Kalpi, in which the mutineers, led by Tantia Topi and the Rani of Jhansi, were severely defeated by Sir Hugh Rose. They retreated in the direction of Gwalior, and on the 1st June Scindia, with 8000 men and 24 guns, moved out from Gwalior to meet them about 2 m. E. of Morar. But there was no fight. Scindia's bodyguard alone offered any resistance, and about sixty of them were killed or wounded. The Maharaja was compelled to fly, and made his way to Agra, where he was followed by his minister.

The Rani thereupon seized the fort of Gwalior, and proclaimed the Nana as Peshwa. On hearing of this Sir Hugh Rose immediately marched upon Gwalior. As he neared it he was joined by Sir Robert Napier (Lord Napier of Magdala), who took command of the 2nd Brigade, and by the Hyderabad troops. On 16th June he came into touch with the rebels at Bahadurpur, near Morar. In spite of the long and fatiguing march which his force had endured, Sir Hugh attacked the enemy at once, and drove them from their position. The main body of the enemy, driven through the Cantonments, fell back on a dry nulla with high banks, running round a village which they had also occupied. Here they maintained a desperate hand-to-hand struggle with the British. The 71st Highlanders suffered severely, and it was not until the nulla was nearly choked with dead that the village was carried. The victory was completed by a successful pursuit of the rebels by the 14th Light Dragoons.

Early next morning (the 17th of June) Brigadier-General Smith, marching up from Jhansi, reached Kotah-ki-sarai, 5 m. to the S.E. of Gwalior, without opposition. There he discovered the enemy in great force, and showing a disposition to attack. The ground in

front of him was impracticable for cavalry, and the enemy's guns were in position about 1500 yds. from Kotah-ki-sarai, and their line lay under the hills, crossing the road to Gwalior. Notwithstanding this he sent his horse artillery to the front, and silenced the enemy's guns, which limbered up and retired. He then sent his infantry across the broken ground, under the command of Colonel Raines of the 95th. Charging at the double, they found themselves stopped by a deep ditch with 4 ft. of water, but it was crossed in single file and the entrenchment was gained. Meanwhile General Smith moved his cavalry across the river Umrah, close to Kotah-ki-sarai. They had hardly crossed when they came under fire of a battery which till then had escaped notice. At the same time a body of the enemy threatened the baggage at Kotah-ki-sarai. Matters now became serious. But General Smith sent back detachments to defend the baggage and rear, and pushed forward. The road, before debouching from the hills between his position and Gwalior, ran for several hundred yards through a defile along which a canal had been excavated. It was while his troops were pressing through this defile that the principal fighting took place. Having gained the farther end of the defile, where he joined Colonel Raines, General Smith halted the infantry to guard it, and ordered a cavalry charge. This was most gallantly executed by a squadron of the 8th Hussars, led by Colonel Hicks and Captain Heneage. The rebels, horse and foot, gave way before them. The Hussars captured two guns, and, continuing the pursuit through Scindia's Cantonment, had for a moment the rebel camp in their possession. Among the slain that day was the Rani of Jhansi, who was wearing the dress of a man. Her horse carried

her along with the other fugitives and refused to leap the canal. She received a shot in her side and a cut on the head, and fell dead. Her body was buried by her followers in a neighbouring garden.

Before sunset on the 19th June, Sir Hugh Rose had occupied the old town and the Lashkar, or new city, and on the following day Scindia re-entered his capital. A few fanatics in the fort alone held out. On the morning of the 20th, Lieuts. Rose and Waller of the 25th Bombay Infantry, who were on duty at the kotwali, or police-station, not far from the main gateway of the fort, took their pickets with them and a blacksmith, together with twenty Pathan police, and crept up to the first gateway unseen. This was burst open by the blacksmith, a powerful man, likewise five other gates. By the time the sixth gate had been forced the alarm was given, and, when the assailants reached the archway beyond the last gate, they were met by the fire of a gun which had been brought to bear on them. Dashing on, they were speedily engaged in a hand-to-hand contest with the garrison. The fight was desperate, and many men fell on both sides. Rose was wounded, as he was encouraging his men to make the final charge, by a musket fired at him from behind the wall. The man, a mutineer from Bareilly, then rushed out and cut him down. Waller came up and despatched the rebel—too late, however, to save his friend. But the rock fortress was gained. Waller received the V.C., and it would have been awarded to Rose if he had lived.

The New City, or Lashkar.—When Daulat Rao Scindia obtained possession of Gwalior in 1794 and 1805, he pitched his camp to the S. of the fort, and a new city rapidly sprang up, which still retains the name of Lashkar,

or The Camp. The *Sarafa*, or Merchants' Quarter, is one of the finest streets in India. In the *Phul Bagh* are the *Jai Bilas* and *Moti Mahal Palaces*. In the latter most of the State offices are at present located. In the centre of Lashkar is the *Barah*, or *Old Palace*, and near it are the houses of the chief Sardars. The *Public Gardens*, which are well laid out, contain a Hindu temple, a Muhammadan mosque, a Sikh *gurdwara* and a Theosophical lodge.

The later buildings worthy of a visit are the *Dufferin Sarai*, the *Polytechnic*, the *Museum*, the *Jayaji Rao Memorial Hospital*, and the *Victoria College*, *Maharaja Jayaji Rao's Cenotaph*, the *Electric Printing Press*, the *General Post Office*, the *Theatre Hall*, and *Market*; the foundation-stone of the Market was laid by the Duke of Connaught, and together with the electrical installation it was opened by King George V. (then Prince of Wales) in December 1905.

Lashkar presents a scene of the utmost animation in October, when the Muharram procession is held on the ninth day of the period of mourning annually observed by Shiah Muhammadans in remembrance of the murder of Hosain at Kerbela in 680 A.D. Both Hindus and Muhammadans take part in the celebration, which is famous throughout India.

The Old City has been gradually decaying, and is now only one-sixth as large as the New City. It is a crowded mass of small, flat-roofed, stone houses, lying along the foot of the N.E. and N. end of the rock. Flanking the city to the N. stands a curious old Pathan archway, the remains of a tomb. Outside the gate of the fort is the *Jami Masjid*, with its gilt pinnacled domes and lofty minarets. Sir W. Sleeman says (*Rambles*, i, 347): "It is a very beautiful mosque, with one end built by Mutamad Khan, in 1661 A.D., of

the white sandstone of the rock above it. It looks as fresh as if it had not been finished a month."

On the eastern outskirt of the city is the noble tomb of **Muhammad Ghaus**, a saint venerated in the time of Babar and Akbar. It is of stone, and is one of the best specimens of Muhammadan architecture¹ of the early Mughal period. It is a square of 100 ft., with hexagonal towers at the four corners, attached at the angles instead of the sides. The tomb is a hall 43 ft. sq., with the angles cut off by pointed arches, from which springs a lofty Pathan dome. The walls are $5\frac{1}{4}$ ft. thick, and are surrounded by a lofty veranda, with square bays in the centre of each side, enclosed by stone lattices of the most intricate and elaborate patterns. These are protected from the weather by very bold eaves, supported on long stone slabs resting on brackets. The dome was once covered with blue-glazed tiles.

The **Tomb of Tansen**, a famous musician, is a small open building 22 ft. sq., supported on pillars round the tombstone, close to the S.W. corner of the large tomb. The tamarind tree near the grave is much visited by musicians, as the chewing of the leaves is alleged to impart a wonderful sweetness to the voice. Tansen was one of "The Nine Gems" of Akbar's Court.

The Fort.—The main entrance to the fort is on the N.E. The ascent was formerly by many flights of broad steps alternating with pieces of paved level road, but these have been removed, and there is now a continuous road. Arrangements for an elephant to ascend the steep incline can be made at the foot in

the case of distinguished visitors or State guests.¹

"The great fortress of Gwalior," says General Cunningham, "is situated on a precipitous, flat-topped, and isolated hill of sandstone," which rises 300 ft. above the town at the N. end, but only 274 ft. at the upper gate of the principal entrance. The hill is long and narrow; its extreme length from N. to S. is $1\frac{1}{4}$ m., while its breadth varies from 600 ft. to 2800 ft. The walls are from 30 ft. to 35 ft. high, and the rock immediately below them is steeply but irregularly scarped all round the hill.

The view from the fort is varied and extensive, but, except during the rainy season, when the hills are green, the general appearance of the country is brown and arid. To the N., on a clear day, may be seen the gigantic temple of Suhania, about 30 m. distant, and still farther in the same direction the red hills of Dholpur. To the W., and within gunshot, lies the long, flat-topped sandstone hill of Hanuman, with a basaltic peak at the N. end and a white-washed temple on its slope, whence the hill has its name. Beyond, far as the eye can reach, nothing is seen but range after range of low sandstone hills. The conical peak of the Raipur hill towers over the lower ranges in the S., and to the E. the level plains, dotted with villages, lengthen till they pass out of sight. On the plain below lies the Old City of Gwalior, encircling the N.E. end of the fortress, and to the S., upwards of 1 m. distant, is the New City of *Lashkar*.

The entrance is protected by six **Gates** which, beginning from below, are :—

The '**Alamgiri Gate**, built by Mu'tamad Khan, Governor of

¹ Permission is no longer required to visit the Gwalior Fort. Visitors sign their names in a book at the entrance to the fort. A nominal fee of one anna is charged.

¹ See Fergusson's *Indian Architecture*, 2, 292.



Gwalior, in 1660, and called after Aurangzeb, whose title as Emperor was 'Alamgir. It is quite plain, and the inscription is obliterated. Inside is a small courtyard and an open hall in which the Muhammadan Governors sat to dispense justice.

The *Badalgarh* or Hindola Gate takes its name from the outwork Badalgarh, which was called from Badal Singh, the uncle of Man Singh. This gate is also called Hindola, from *hindol*, "a swing," which existed outside. It is a fine specimen of Hindu architecture. An inscription on an iron plate records its restoration by the Governor Saiyad 'Alam in 1648.

Close under the rock to the right is the stately *Gujari Palace*, built for the Queen of Man Singh. It measures 300 ft. by 230 ft., and is two storeys high. It is built of hewn stone, and was once a very fine building. The *Archæological Museum*, which was opened in 1922 by the present Prince of Wales, is installed here.¹ It contains numerous sculptures, inscriptions, and other objects of interest collected from different parts of the State. There is a fine set of copies of the frescoes in the Caves of Bagh (p. 150). The Museum is closed on Mondays.

The *Bhairon*, or Bansur Gate, which has been removed, was the work of one of the earliest Kachhwaha Rajas. It was called Bansur, from *bansur*, "archer"—literally a "bamboo-splitter,"—from the guard which had the charge of it.

The *Ganesh Gate* was built by Dongar Singh, who reigned 1424 to 1454. Outside is a small outwork called *Kabutar Khana*, or "pigeon-house," in which is a tank called Nur Sagar, 60 ft. by

39 ft. and 25 ft. deep. Here, too, is a Hindu temple sacred to the hermit *Gwalipa*, from whom the fort had its name. It is a small, square, open pavilion, with a cupola on four pillars. There is also a small mosque with a chronogram giving a date corresponding to 1664 A.D.

Before reaching the *Lakshman Gate* is a temple hewn out of the solid rock and called *Chatarbhuji-mandir*, "shrine of the four-armed," sacred to Vishnu, inside which, on the left, is a long inscription, dated Sambat 933 = 876 A.D. It is 12 ft. sq., with a portico in front 10 ft. by 9 ft., supported by four pillars. There is a tank here, and opposite to it the tomb of Taj Nizam, a noble of the Court of Ibrahim Lodi, who was killed in assaulting this gate in 1518 A.D. An awkward flight of steps leads to the *North-Eastern group* of Jain Statues in the cliff under the Muhammadan palaces (see p. 180). The sculptures are small, and unaccompanied by inscriptions, and are, therefore, unimportant; some of the caves are large. Farther S., on the face of the rock, are carvings of Mahadeo and his consort and about fifty lingams. There was also a colossal group of the Boar incarnation, 15½ ft. high, which was one of the oldest sculptures in Gwalior; but it is now quite defaced. A figure of an elephant over the statue has been cut away to form a canopy.

The *Hathiya Paur*, or Elephant Gate, was built by Man Singh, and forms part of his palace. Here was the carving of an elephant, which Babar and Abul-Fazl praised. Inside the Hathiya Paur and under the S. end of the Palace of Man Singh is the *Hawa Gate*; and the cool draught of air met through the passage here after the long hot ascent in the morning will be found to justify the name.

Turning to the right on reaching the level of the fort, the five

¹ The territory of the Gwalior State is rich in buried monuments; and excellent work is being done by the Archæological Department in the direction of excavation and preservation, notably at Mandasor (p. 154), Chanderi (p. 172) and Bagh.

palaces under which the ascent has passed may be first visited. The first of these is the **Man Singh Palace** (1486-1516, repaired in 1881), also called the *Chit Mandir*, or Painted Palace, as "the walls are covered with a profusion of coloured tiles—bands of mosaic candelabra, Brahmani ducks, elephants, and peacocks—enamelled blue, green, and gold, giving to this massive wall an unsurpassed charm and elegance. The tiles of the great windowless S. wall possess a brightness and delicacy of tint unblemished by the four centuries which they have weathered. Nowhere do I remember any architectural design capable of imparting similar lightness to a simple massive wall" (Rousset).¹ The palace was greatly admired by the Emperor Babar. It is two storeys high, with two storeys of underground apartments, now uninhabitable from the bats. The E. face is 300 ft. long and 100 ft. high, and has five massive round towers, surmounted by open-domed cupolas, and connected at top by a battlement of singularly beautiful open lattice-work. The S. face is 160 ft. long and 60 ft. high, with three round towers connected by a battlement of lattice-work. The N. and W. sides are somewhat ruined. The rooms are arranged round two courts—small, but with singularly beautiful decoration.

The *Vikram Palace* lies between the Man and Karan Palaces, and is connected with them by narrow galleries.

The **Karan Palace** should be called the Kirti Mandir. It is long and narrow, and of two storeys. It has one room 43 ft. by 28 ft., with a roof supported by two rows of pillars. There are smaller rooms on either side, and bath-rooms below, with some fine plaster-work on the domed ceil-

ings. Close by to the S. is a hall (1516 A.D.) 36 ft. sq., with a roof in the form of a Hindu dome, supported on eight carved ribs, of which four spring from the side pillars and four from the angles of the building. Internally the top of the dome is a flat square formed by the intersection of the ribs. The roof is flat, and once had a pavilion on it.

The **Muhammadian Jahangiri and Shah Jahan Palaces** at the N. end of the fort are of rubble plastered, and are quite plain and of no architectural interest. They are used now as magazines for military stores.

A little to the N.W. of them is the Johar tank, so called from the immolation of Rajput women, which occurred here before the fortress was taken by Altamsh in 1232 A.D. On the W. wall slightly to the S., and just above the Dhonda Gate, are the ruins of the buildings known as the Nauchauki or Nine Cells, which was used as a State prison in the time of the Mughal Emperors. The narrow, steep staircases leading to the dungeon rooms can still be traversed and the cell is shown in which Aurangzeb's brother Murad was confined (1659-1661).

Passing S. beyond the Hawa Gate and the guard-house facing it, the next object of interest is the ruined Jain Temple (1100 A.D.) on the E. wall, of which little now remains. Farther S., on the same side, are the two **Sasbahu** temples, and from the walls near all three a fine view is obtained of the Eastern cliff of the fortress. The names Sas-bahu or *Sahasrabahu*, which mean "mother-in-law and daughter-in-law," are popularly given to two similar temples or wells standing side by side. The larger temple is 100 ft. long by 63 ft. broad. It bears an inscription in Sanskrit which records that it was built in 1093 A.D. by Raja Mahi Pal, one of the Kachhwaha Rajput

¹ *India and its Native Princes*, by Louis Rousset (Chapman & Hall, 1876).

princes of Gwalior. The entrance is to the N., and the adytum to the S. The temple is now 70 ft. high, but the top has been broken, and General Cunningham thinks it was once 100 ft. high. It stands on a richly-carved plinth. There is a long inscription inside the portico, with the date 1093 A.D., and there are figures of Vishnu over the main entrances. The central hall is 31 ft. sq. It is crowded with four massive pillars to aid in bearing the enormous weight of its great pyramidal roof. The smaller temple is built in the shape of a cross, and is open on all four sides. The body is 23 ft. sq., supported on twelve pillars. The plinth is 6 ft. high, and is decorated like that of the great temple. The pillars are round, with octagonal bases and bracketed capitals. The lower parts of the shafts in both temples are ornamented with groups of female dancers. They are fine specimens of the ornate style of mediæval Hindu architecture.

From this point it is necessary to cross again to the W. side, where the Teli-ka-mandir stands, passing the Suraj Kund tank *en route*. This tank is 350 ft. by 180 ft., and is believed to have been constructed about 300 A.D., and to be consequently the oldest reservoir in the fort.

The **Teli-ka-mandir**¹ (probable date, 9th century; restored 1881-83) is 60 ft. sq., with a portico projecting 11 ft. on the E. side. The sides slope upwards to 80 ft., where the building ends in a horizontal ridge 30 ft. long. It is the loftiest building in Gwalior. The doorway is 35 ft. high, and has a figure of Garuda over the centre. It was originally a Vishnavite temple, but since the 15th century it has been Saivite. The name appears to be a corruption of *Telangana*, and from the Dravidian

style of the spire, it has been thought that the architect was a Telangana, or Telugu. The whole is covered with sculptures. The gateway in front of it was formed out of fragments found in the fort by Major Keith, R.E., who was entrusted with the repairs and restorations made in 1881-83. The interesting archæological fragments placed round the temple were discovered in various parts of the fort during Major Keith's operations. The temple is close to the cliff of the Western Urwahi ravine, outside the Southern wall of which Colonel White's breach was made in 1803, and every one will proceed past the round Katora tank and the Ek Khamba tank, with a pillar in it, as far S. as this and the point, still called Faringhi Pahar, of Major Popham's esplanade in 1780; while those who continue to the extreme S. point of the fort will not be disappointed by the interesting tanks (Dhobi Talao, Rani Talao, Chedi Talao) and the beautiful view of Lashkar.

Returning from the S., the Ganga tank may be visited, and the route may be pursued to the N.W. of the Suraj Kund, opposite the Katora tank to the fine gate which forms the entrance to the Urwahi ravine, on the farther side of which is the Mansarowar tank. The S. end of the ravine is closed by a wall with a double gate, near which are the wells which supply the fort with drinking-water; and on either side of it, from the bottom of the steep descent from the N. gate, are the Jain statues of the Urwahi group.

"These Rock Sculptures of Gwalior," writes General Cunningham, "are unique in Northern India, as well for their number as for their gigantic size. They are all excavated in the steep cliff immediately below the walls of the fortress, and are most of them easily accessible. There are small caves and niches in almost every place

¹ "Oilman's Temple"; see Fergusson's *Indian Architecture*, 2, 139.

where the face of the rock is tolerably smooth and steep, but the more prominent excavations may be divided into five principal groups, which I will designate according to their positions, as 1st, the Urwahi group; 2nd, the South-Western group; 3rd, the North-Western group; 4th, the North-Eastern group; 5th, the South-Eastern group. Of these the first and the last, which are by far the most considerable both in number and size, are the only sculptures that have attracted travellers." Most of them were mutilated by order of the Emperor Babar, 1527 A.D., only sixty years after they were made. Babar himself records the fact in his memoirs: "They have hewn the solid rock of this *Urwah*, and sculptured out of it idols of larger and smaller size. On the S. part of it is a large idol, which may be about 40 ft. in height (really 57). These figures are perfectly naked. *Urwah* is far from being a mean place; on the contrary it is extremely pleasant. The greatest fault consists in the idol figures all about it. *I directed these idols to be destroyed.*" The statues, however, were not destroyed, but only mutilated, and the broken heads have since been repaired by the Jains with coloured stucco.

The *Urwahi group* consists of twenty-two principal figures, which are accompanied by six inscriptions, dated Sambat 1497, 1510=1440 A.D. and 1453, during the sway of the Tomar Rajas. The chief statues are: No. 17, a colossal figure of Adinath, the first Jain pontiff, who is known by the symbol of a bull on the pedestal. This has a long inscription, dated 1440 A.D., in the reign of Dongar Singh. The largest figure of this group, and of all the Gwalior sculptures, is the colossus, No. 20, which is 57 ft. high, or six and a half times the length of the foot, which is just 9 ft. The extreme W. figure of this group,

No. 22, is a seated colossus upwards of 30 ft. high, of Nem-nath, twenty-second Jain pontiff, known by a shell on the pedestal.

"The *South-Western group*, just outside the Urwahi wall, consists of five principal Jain figures. No. 2 is a sleeping female 8 ft. long, lying on her side, with her head to the S. and face to the W. No. 3 is a seated group of a male and female with a child, who are Siddhartha and Trisala, the reputed father and mother of the infant Mahavira, the last of the twenty-four Jain pontiffs. The sleeping female also is probably intended for Trisala." S. of this group is the Gargaj Gate (closed) at which Colonel White's assault of the fortress was made.

If it is desired to proceed from here to the Jain sculptures on the S.E. face of the fortress, the carriage should be sent round to this point from the N.E. entrance. (The *N.E. group* is described on p. 185.) It is quite impossible, however, to see all the interesting sights of the Gwalior fort on a single visit, and each visitor must decide for himself what he will see and how he will see it. The road from the Arwahi ravine to the Lashkar, and round to the nearest point to the South-Eastern group which a carriage can reach, is fair.

The *South-Eastern group* is the most picturesquely situated of all, with trees and undergrowth adjoining it below; it is also the largest and most important group, as there are eighteen colossal statues from 20 ft. to 30 ft. high, and as many more from 8 ft. to 15 ft., which occupy the whole face of the cliff for upwards of $\frac{1}{2}$ m. They are all of date 1468-1473 A.D., and are the latest of such works in India. In many cases a screen-wall has been left in front of the figure as high up as its waist. A few caves are occupied by mendicant Bairagis, and cannot always be visited. The

table below gives details of each statue.

The *North-Western group* is best visited by passing round the N. side of the city; the figures, however, are insignificant.

From Gwalior three light lines of State Railway run, S.W. to Shivpuri Ry. Stn. (74 m.), not far from which, in the Narwar jungle,

Kund. Metalled roads run N. to Gwalior (74 m.) S. to Guna (61 m.), and E. to Jhansi (81 m.). The old and historic town and fort of **Narwar** can be reached by motor, 26 m. to the N., through picturesque scenery. 12 m. from Shivpuri on the Jhansi road is **Surwaya**. A ruined fortress enclosing a Hindu monastery, three

CAVES.		SCULPTURES.			
No.	Front depth and height.	Names.	Position.	Height.	Symbol.
	Feet.			Feet	
1	23×21×27	—	—	30	—
2	10×10×10	—	—	—	—
3	15×12×17	Adinath	Standing	7	Bull
4	15×14×16	4 others	—	—	—
		Adinath	—	14	Wheel
		Nemnath	—	—	Shell
5	—	Adinath	—	—	Bull
6	26×12×16	Supadma	Sitting	15	Lotus
7	15×10×20	—	Standing	20	—
8	21×10×20	Adinath	Sitting	6	—
9	16×7×28	Male Figure	Standing	21	—
10	10×7×15	Female	Lying	—	—
		Chandra Prabha	Standing	12	—
		2 others	—	12	—
11	12×8×25	Chandra Prabha	Sitting	21	Crescent
12	31×10×25	Sambhunath	—	21	Horse
13	40×10×25	Nemnath	Standing	21	Shell
		Sambhunath	Sitting	—	Horse
		Mahavira	Standing	—	Lion
14	26×16×32	Adinath	Sitting	29	Bull
15	26×16×33	Adinath	Sitting	28	—
16	24×22×34	—	—	30	—
17	20×8×30	Kantannath	Standing	26	Goat
		Shantanath	Sitting	26	Antelope
		Adinath	Sitting	26	Wheel
		And 4 others	—	26	—
18	15×10×30	—	Standing	26	—
19	16×10×30	—	—	26	—
20	12×8×20	Adinath	—	8	Wheel
21	27×35×15	—	—	—	—

the rebel Tantia Topi was betrayed and captured on 7th April 1859; N.E. to Bhind (53 m.) and, W. by S. to Sabalgarh and Sheopur.

Shivpuri or **Sipri** (hotel: motor car available), the summer capital of the Maharaja Scindia lies on a plateau, 1300 ft. above sea-level, on the Agra-Bombay road; 73 m. from Gwalior, and 61 m. from Jhansi, by road. There is a handsome mausoleum of the mother of the late Maharaja: close to it is a natural spring, the Bhadaya

Hindu temples with fine carvings and a *baoli* or well are to be seen here; all are of the 10th century A.D.

336 m. About 4 m. S. of Dholpur there is a very fine bridge over the Chambal, built of the famous red sandstone of Dholpur, a ridge of which, from 560 ft. to 1074 ft. above sea-level, runs for 60 m. through the territory, and has many quarries. The river Chambal is bordered everywhere by a labyrinth of ravines, some of which

are 90 ft. deep and extend to a distance of from 2 m. to 4 m. from the river-banks. The floods of the river are very remarkable. The highest recorded flood above summer level rose no less than 97 ft.

340 m. Dholpur station (R.), the chief town of the Jat State of that name, which has an area of 1200 sq. m., with a pop. of 230,188 and an annual revenue of nearly 19 lakhs. The present Maharaj Rana, Lieut.-Col. H.H. Sawai Sir Udaibhan Singh Lokindra Bahadur, K.C.S.I., K.C.V.O., was born in 1893 and succeeded his brother in 1911. The State in its present form dates from 1805, when the Governor-General (Sir George Barlow) placed Maharaj Rana Kirat Singh, the last Rana of Gohad (a State founded in 1505) in possession of three of Scindia's districts and transferred Gwalior and Gohad to Scindia. In 1658 Aurangzeb defeated his elder brother Dara Shikoh at Ran-ka-chabutra, 3 m. E. of Dholpur, and in 1707 Aurangzeb's sons, Azam and Mu'azzam, contending for the crown, fought a great battle at the village of Barehta, near Dholpur, the former being killed, and the latter becoming Emperor, with the title of Bahadur Shah. The palace of Dholpur is a moderately handsome building. The High School is housed in a building originally built as a mausoleum. Among other public institutions are a Sardar Hospital, well equipped; a Dharmasala; and a D.B. opposite to the railway station at Dholpur. At Mania, stn. 7 m. from Dholpur on the G.I.P., there is another D.B. The accommodation at both Dholpur and Mania D.Bs. is reasonably sufficient. A State light ry. runs from Dholpur to Bari, 20 m., thence to Tantpur. The climate is generally healthy, and the annual rainfall for the whole State averages between 25 in. and 28 in.

The mean temperature at Dholpur varies from 60 in January to 96 in May.

Among other objects of archaeological interest in Dholpur State are :—(1) Shergarh fort, which is supposed to have been built some 3000 years ago by Raja Maldeo. It was repaired and rebuilt by several Rajas in the later generations. In 1540 Sher Shah, of the Sur dynasty, who drove Humayun out of India, restored it and gave it its present name of Shergarh. It was lastly used by Maharaja Rana Kirat Singh in the early part of the 19th century; but now, being neglected, it is crumbling away. (2) The fort of Bari, which was built by the Ghori Emperor Firoz Shah in 1286 A.D. It has been rebuilt from time to time, and is now used as headquarters of the Bari Tahsil. (3) Khanpur Mahal, which is situated some 3 m. to the S. of Bari, and consists of a long and picturesque series of pavilions, the principal of which are enclosed by a wall. The Mahal was built for the Emperor Shah Jahan by Safi Khan Aziz Khan, a local Mansabdar. The palace was never occupied, and gradually fell to pieces. An attempt has been made by the Dholpur Darbar to repair and renovate some pavilions. Just below the palace is a large tank—an extensive sheet of water, where an annual duck shoot of the Maharaj Rana is held. (4) Mach Kund. It is a historical tank surrounded by temples, at which fairs are annually held. Both ancient and modern temples crowd the place, but the older buildings are falling to pieces. It is considered to be a sacred place, and its name is traced back to a Raja of that name, the twenty-fourth of the Surajbansi, who reigned nine generations before the birth of Sri Ramchandra. (5) Ram Sagar. This is a modern work, and is an extensive irrigation tank constructed by Maharaj Rana Ram Singh at a cost of above

3 lakhs of rupees, to supply water to the surrounding villages in Tahsil Bari.

371 m. from Itarsi, **Agra Cantonment** station where travellers by this route alight for the hotels (Route 13). The G.I.P. line runs through the Raja-ki-Mandistation (where there is a branch to Agra city on the E.I.R.), to

33 m. **Muttra** junction (p. 256), passing **Sikandra** (p. 279). From Muttra the line continues as in Route 12 (p. 265) to

89 m. **DELHI** Main Station (Route 14).

ROUTE 10.

BOMBAY to **DELHI** by **Surat**, **Broach**, **Miyagam** (for Dabhoi), **Baroda** and **Ahmadabad**, by broad-gauge; thence by metre-gauge of the B.B. and C.I. to **Delhi** (849 m.) by **Mehsana**, **Palanpur**, **Abu Road** (for **Mt. Abu**), **Marwar** junction, (for **Luni** junction, branch line to **Hyderabad**, **Sind** and **Karachi**), **Jodhpur**, **Merta Road** (for **Bikanir**), **Ajmer**, **Phalera** junction, **JAIPUR**, **Bandikui** junction, **Alwar**, **Rewari**, and **Gurgaon**.

Both the "Kathiawar Mail" (Route 11) and the "Gujarat Mail," which leave the Colaba station in Bombay city of the B.B. and C.I. Ry., run over the broad-gauge as far as Ahmadabad. From Ahmadabad the journey to Delhi is continued over the metre-gauge system of the same ry. to Marwar jn., where passengers for Hyderabad (Sind) and Karachi

change carriages. From Marwar jn. the metre-gauge Delhi Mail proceeds to Ajmer, Jaipur, Bandikui, Alwar and Rewari. First-class fare to Delhi by this route is Rs.84-5-0; second class, Rs.42-2-0.

10 m. **Mahim** station, where the railway crosses a causeway connecting the island of Bombay with the island of Salsette. The country is flat and studded with villages and cocoanut groves. The Mahim causeway was constructed largely at the expense of the first Lady Jamsetjee Jeejeebhoy.

11 m. **Bandra** (see p. 31).

13. **Santa Cruz**: Cantonment for a sepoy regiment. The Bombay Hunt Kennels are here.

23 m. **Borivli**; 29 m. **Bhayndar**; 34 m. **Bassein Road** (see p. 34).

109 m. **Daman Road** station,* (D.B.). **Daman** (7 m. W.) is a Portuguese settlement subordinate to Goa (area 149 sq. m.). It was taken by the Portuguese in 1531, again in 1535, and finally in 1559. The town (of historic interest) is situated on the Daman Ganga river, with a bad bar and a roadstead. The place in the days of small ships had a very considerable trade. It has a fort on each bank of the river. In the main fort, on the left bank, are the ruins of several old monasteries and two churches; and also the houses of the Governor and his staff and the public offices. The smaller fort of St Jerome, opposite, is more modern.¹

115 m. **Udvada** station. Remarkable as containing the oldest Parsi sacred fire in India. It is said to have been originally brought from Persia by the Parsis, and first kindled at Diu in

¹ For the Portuguese possessions in India see p. 556.

700 A.D. The temple in which the fire is kept is modern.

125 m. **Balsar station.** This place is occasionally used as a rest-camp, and near it is the village of Tithal, on the sea-coast, where many inhabitants of Gujarat resort in the hot season. There are fine sands and a rolling sea, though not so fine as at Dahanu and Gholwad (Thana district).

149 m. **Navsari station** (population 17,982). The capital of the Gaekwar's Southern possessions, and the headquarters, from the earliest days, of the Parsi community. Here the Zoroastrian Priesthood receive their initiation and confirmation. There is an excellent sanatorium for Parsis. The *Town Hall* is an imposing building.

167 m. **Surat station** * (Pop. 117,434; R., D.B., 2 m.). The name is connected with Saurashtra, or Sorath, a term applied to the neighbouring districts of Gujarat and Kathiawar, which occurs in the *Mahabharata* and the *Periplus*. It is variously interpreted as meaning the "good land" or "the land of the Suras." Amongst Indian cities Surat is not a place of antiquity, but it had a large trade at the end of the 15th century, and in the 18th was one of the most populous and important mercantile cities in India, the port being much frequented by British and other European traders. It is the headquarters of a Collectorate, is situated on the river Tapti, and is surrounded on the land side by a wall about 5½ m. in circuit, with twelve gates. Except the main street, running from the station road to the castle, the streets in Surat are narrow and tortuous, and some of them still bear marks of the great fire in 1837, which raged for nearly two days, when 9373 houses were destroyed and many persons

perished. Again in 1889 a fire broke out, which raged over twelve hours, and destroyed 1350 shops and houses. Besides fires, Surat has suffered severely from floods, the severest being in 1837, the same year as the fire, and in 1883. In 1896 Lord Elgin inaugurated here the Tapti Railway, a local joint-stock enterprise, to run up the valley of the Tapti (see p. 195).

About the 12th century the Parsis, who were driven from Persia 500 years before, and had settled in *Sanjan*, 70 m. S. of Surat, found their way here. In 1512 the Portuguese sacked the then open town. On the 26th February 1573 it surrendered to Akbar after a siege of one month and seventeen days. Under the Mughals, as the "Gateway of Mecca," it became a port of primary importance for trade and pilgrim traffic; and the Banyas of Surat grew fabulously wealthy. Early in the 17th century the English began to visit it, and in 1612 the Mughal Emperor sent down a *farman* authorising an English envoy to reside at his court, and opening to English subjects the trade at Surat.¹ In 1615 Captain Downton, with four ships, mounting eighty guns, defeated the Portuguese fleet, consisting of four galleons, three other large ships, and sixty smaller vessels, mounting in all 134 guns. This victory established the reputation of the English for war and their superiority over the Portuguese. The Dutch trade with Surat commenced in 1616, and for some years the Dutch Factory competed successfully with the English there. The French Factory was not founded till 1668, when the agents of the French E.I. Company, which Colbert had established in 1664, settled at

¹ There is an excellent account (with illustrations) of the Surat factory in *British Beginnings in Western India*, by H. G. Rawlinson (Oxford, 1920).

Surat. On the 5th January of the same year (1664) the prosperity of Surat received a severe blow from Sivaji, the founder of the Mahratta Empire, who with 4000 horse surprised the city, and plundered it for six days. The defenders of the English Factory, under Sir George Oxinden, who described the Mahratta leader as "Sevagy, ye grand rebell of ye Deccan," showed a bold front throughout, and recommended Sivaji to "save the labour of his servants running to and fro on messages, and come himself with all his army," and in the end were left unassailed. Their courageous defiance so pleased Aurangzeb that he sent Oxinden a robe of honour, and granted the English an exemption from customs. The walls of Surat up to this time were of mud, but they were now ordered to be built of brick. In 1687 the seat of Government was transferred by the E.I. Company to Bombay from Surat, which was again partially pillaged by the Mahrattas in 1670, 1702, and 1706. About this time commenced the disputes of the rival London and English Companies, and on the 19th of January 1700 Sir Nicholas Waite, Consul for the King and President of the New Company, arrived at Surat. The struggle of the Companies continued till 1708, when they were united. This marked a new era for the English at Surat, who were fast approaching the period when they were to acquire political influence in the city, then the greatest emporium of W. India. The factory of the New Company is now occupied by the Irish Presbyterian Mission.

In 1759 the Nawab, by misgovernment and vexatious oppression of the Company's officers provoked a conflict. The townspeople welcomed the attack, which was delivered near Athwa village, and resulted in the complete defeat of the Nawab's troops. He then signed a treaty by which the

castle and fleet were made over to the British for a yearly stipend of Rs.200,000. This arrangement was confirmed by the Emperor at Delhi, and the British authority was firmly established in Surat, which was definitely taken over in 1800. In 1842 the last titular Nawab died, and the flag of Delhi was removed from the castle.

The Castle, so prominent in the early annals of the British in W. India, stands at the point where the fine Tapti bridge, built under the auspices of Sir Theodore Hope (Magistrate-Collector 1867), abuts on the banks of the river. It was erected by a Turkish soldier about 1546, and is a brick building with walls about 8 ft. thick, much modernised. There is a good view of the city and river from the S.W. bastion. Over the E. gateway is an inscription, and adjoining it is the well-kept *Victoria Garden*, of 8 acres. The adjoining church was consecrated by Bishop Heber.

The remains of the original *English Factory* are near the way to the Kataragam Gate, close to the river, on the N. side of the city. It is doubtful whether, in spite of the tablet to that effect, the picturesque bungalow shown to visitors occupies the actual site of this cradle of British rule in India. Near it is the *Portuguese Factory*, where some records are still kept. A wooden cross marks the site of the church. Close to this are the vacant site of the *French Lodge* and the *Persian Factory*. There is a fine view of the town from the *Clock Tower*.

The *English Cemetery*, N. of the city, on the Broach road, should be visited. It is one of the most remarkable in India. To the right on entering, is the massive mausoleum of Sir George Oxinden, President of Surat and Governor of Bombay, who died on 14th July

1669, and his brother Christopher (d. 1659). The structure is composed of two tombs. The first, a domed building with four pinnacles at the corners, was erected over the grave of Christopher, and a Latin inscription in the old English character, written by his brother, was placed inside on a small marble slab. On the death of Sir George, it was enclosed in another building, similar in style, but two-storeyed, and surmounted by a dome which resembles an open cross. In the upper compartment is a large marble tablet bearing an inscription. Close by is another tomb of considerable pretensions, supposed to be that of Gerald Aungier (d. 30th June 1677), Oxinden's successor; it remained for many years without an inscription, but now bears a tablet. There are other monuments which merit examination. Out of 400 tombs, ranging in date from 1646 to the middle of the 19th century, over seventy are in memory of children under the age of five. The adjoining **Dutch Cemetery** is also distinguished by the great size of its monuments. The most striking is that of "His High Nobility" Baron Adriaan van Reede (d. 15th December 1691), "Commissary for India of the United Netherlands East India Company, representing in that capacity the Assembly of the Noble Lords of the Seventeen," who was the author of the *Hortus Malabaricus* and the collector of valuable books and curiosities which he sent to Holland. The tomb, which is said to have been built with the intention of eclipsing that of Sir George Oxinden, consists of a double cupola of immense dimensions with a gallery above and below, supported on handsome columns. It was formerly decorated with frescoes, escutcheons and passages from Scripture, and its windows were filled with wood-carving. A bill is extant charging the Dutch Company with Rs.6000

for mere repairs. It will be noticed that in the inscription, which is in Dutch, "Cochim" and "Souratte" are engraved in capital letters and "bombai" in small ones. Near the Dutch cemetery is the Armenian cemetery, with many well-carved stones, having inscriptions in the Armenian language. All the cemeteries are kept in good order at the expense of Government.

The chief Mosques of Surat are—

1. Khwaja Diwan Sahib's Mosque, built about 1530. He is said to have come to Surat from Bokhara, and to have lived to the age of 116.
2. The Nau Saiyad Mosque, "Mosque of the Nine Saiyads," on the W. bank of the Gopi Lake.
3. The Saiyad Idrus Mosque, in Saiyadpura, with a minaret, one of the most conspicuous objects in Surat; it was built in 1639 in honour of the ancestor of the present Kazi of Surat.
4. The Mirza Sami Mosque, built in 1540 by Khudawand Khan, who constructed the castle.

The Tombs of the Bohras deserve a visit. There are two chief **Parsee fire-temples**, built in 1823. The Hindu sect of the Wallabhacharis has three temples. The **Swami Narayan** temple, with three white domes, is visible all over the city. In the two old temples in the Ambaji ward the shrines are 15 ft. underground, a relic of Muhammadan persecution. The **Shravaks**, or Jains, have forty-seven temples, the chief of which are from 150 to 200 years old. There are several steam *Cotton Mills* in Surat. Gold and silver wire and spangle manufacture and brocade work are important industries; while carved sandalwood and inlaid work are still manufactured to some extent. Silk weaving is the chief "home industry," in which Surat is largely supplanting Benares.

Near the fort the Hope Bridge

spans the Tapti, and 3 m. across it is *Rander*, built on the site of a very ancient Hindu city, destroyed by the Muhammadans in the 12th century. The Jami Masjid stands on the site of the principal Jain temple. In the façade the bases of the Jain columns are still visible, and the doorstep is reputed to be a great idol placed head downwards for the faithful to tread on in entering the mosque. In another mosque are the wooden columns and domes belonging to a Jain temple, which are the only wooden remains of the kind in India.

Besides the three cemeteries in the city, there was another place of interment for Europeans at *Swally* (Suvali), the old seaport of Surat, about 12 m. W., outside the mouth of the Tapti. Here, according to his friend Edward Terry, chaplain to Sir Thomas Roe's embassy to the court of Jahangir, was the grave of Thomas Coryat, the "English Fakir" and author of "Coryat's Crudities," who tramped on foot from London to India, limiting his expenses to twopence a day, which he procured by begging. From the Mogul Court at Ajmer (p. 220) he walked to Surat, where he arrived desperately ill with dysentery and died in December 1617. All trace of his grave has disappeared, although local tradition identifies it with a monument in the Muhammadan style at Rajgari, a village near Swally. At Jajira, not far from Swally, is a lighthouse on the right bank of the Tapti, near the mouth of the river; and adjoining it is a tomb with a high dome which bears no inscription but is known as Vaux's Tomb. Vaux was Deputy-Governor of Bombay and was drowned with his wife in 1697 by the upsetting of their boat on the river.

Near Swally is the little seaside village of Dumas, the residence of H.H. The Nawab of Sachin, who,

like his relative, the Nawab of Janjira (44 m. below Bombay on the coast), is descended from the Sidi (Abyssinian) admirals of the coast.

The Tapti Valley Railway runs from Surat to Amalner (147 m.) through Nandurbar; from Amalner a branch of the G.I.P. Railway, 35 m. long, runs to Jalgaon (p. 43).

2 m. after leaving Surat the *Tapti* or *Tapi River* is crossed by a very long bridge, and close to Broach the *Narbada* or *Narmada River* is passed on the finest *Bridge* on the railway, consisting of 25 spans, with a good view on the left of Broach. A motor can be taken across the *Narbada* only by train.

From (198 m.) *Ankleswar* a branch runs (41 m.) N.E. to *Nandod* in Rajpipla State (1517 sq. m., with a pop. of 168,454 and an annual revenue of 32 lakhs), the present chief of which, H.H. Maharaja Sir Vijaya Sinhji Chhatra Sinhji, K.C.S.I. (born 1890, succeeded 1915), is well-known in English racing circles.

204 m. *Broach* (*Bharoch*) station (R., D.B.), is a place of extreme antiquity (pop. 41,341). Narrow gauge line, 30 m. N.W., to Jam-busar. The author of the *Periplus*, 60-210 A.D., mentions Broach under the name of Barugaza. It was then ruled by a feudatory Gurjara Prince, and subsequently fell under the rule of the Chalukyas. The Moslems appeared in the 8th century, and Broach was ruled by them from 1297 to 1772. In 1613 A.D. it was first visited by Aldworth and Withington, English merchants; and in 1614 a house was hired for a factory, permission to establish which was granted to Sir Thomas Roe by Jahangir in 1616. The Dutch set up a factory in 1617. In 1686 the Mahrattas plundered Broach. On the 14th of November 1772 the British troops stormed the place with the loss of their commander Brigadier

David Wedderburn, whose tomb is at the N.W. corner of the fort. On the 29th of August 1803 Broach was again taken by storm by the British.

The *Narbada* here is a noble river, 1 m. in breadth. The city with its suburbs covers a strip of land $2\frac{1}{2}$ m. long and $\frac{1}{2}$ m. broad, hence by its inhabitants it is called *Jibh*, or "the tongue," and its shape is described as "*Paghdi Pahna*," or length like a turban cloth without the proportionate breadth. The *Fort* stands on a hill more than 100 ft. above the river, and a massive stone wall lines the river-bank for about 1 m. In it are the Collector's Office, the Civil Courts, the Dutch Factory, the Jail, the Civil Hospital, the English Church and School, the Municipal Office, the Victoria Clock Tower, Sir Shapurji Bharucha Institute, and the Library. The streets of the city are narrow and some of them steep. The *Jami Masjid*, lying at the E. foot of the fort, is an old Jain temple, which has been in the possession of the Muhammadans from ancient times. On the W. end of the thickly populated city is the spacious *Idgah*, or the Muhammadan place of worship on the *Id* holidays, which, it is said, is the largest of the sort on this side of India. Farther on are the bungalows of Government officers and wealthy citizens, and the police headquarters. At the farthest end, at the place called "*Kursi*," is the Rothfeld Garden, on the high bank of the river. The view of the low lands of the opposite shore from this place over the straight broad waters of the smoothly flowing river is specially charming and attractive. On the N.W. side of the city, at a distance of 1 m., is the tomb of Bawa Rahan, and a mosque situated on an isolated high hillock commanding a good view of the surrounding plain and adjoining villages.

The Dutch tombs are 2 m. W. of the fort, and some 100 yds. off the road, left. Two of them are from 16 ft. to 20 ft. high.

Opposite the Dutch tombs are five *Towers of Silence*, one of them about 15 ft. high. The second tower is still in use. Outside the E. gate, on the river bank, is the *Temple of Bhriгу Rishi*, from whom the town got the name of *Bhriгukachha*, contracted into *Bharoch*. The common Parsi surname of *Bharucha* denotes a man of Broach.

Broach is celebrated for its cotton; there are five spinning and weaving mills, employing 2000 hands, besides ginning and cotton-pressing factories. The district, though small, with a population of only 307,000, is the richest in the Presidency.

10 m. to the E. of Broach is the celebrated place of Hindu pilgrimage, *Suklatirth*, on the N. or right bank of the *Narbada*. Here *Chanakya*, King of *Ujjain*, was purified of his sins, having arrived at this holy spot by sailing down the *Narbada* in a boat with black sails, which turned white on his reaching *Suklatirth*. Here, too, *Chandragupta* and his Minister *Chanakya*, were cleansed from the guilt of murdering *Chandragupta's* eight brothers; and here *Chamund*, king of *Anhilwara*, in the 11th century, ended his life as a penitent. There are three sacred waters—the *Kavi*, the *Hunkareswar*, and the *Shukul*; at the second is a temple with an image of *Vishnu*. A fair is held here in November, at which 25,000 people assemble. Opposite *Mangleswar*, which is 1 m. up stream from *Suklatirth*, in the *Narbada*, is an island, in which is the famous *Banyan Tree*, called the *Kabir wad*, or "the fig-tree of *Kabir*," from whose toothpick it is said to have originated. It has suffered much from floods. *Forbes*, who visited Broach 1776-83, and was

the first Collector of the district, says, in his *Oriental Memoirs* (I, p. 26), that it enclosed a space within its principal stems 2000 ft. in circumference. It had 350 large and 3000 small trunks, and had been known to shelter 7000 men. Bishop Heber, in April 1825, wrote that, though much had been washed away, enough remained to make it one of the most noble groves in the world. A small temple marks the spot where the original trunk grew.

229 m. **Miyagam** junction station. This is a junction of a system of narrow-gauge railways (2' 6") owned and worked by the Baroda State.

Dabhoi, 20 m. from Miyagam, is a town belonging to the State of Baroda (pop. 15,870). The ancient Hindu architecture of this place is most interesting, but is little known.¹ The fort is said to have been built by the Vaghela king of Patan in the 13th century. The *Baroda Gate* is 31 ft. high, with elaborately carved pilasters on either side. The carvings represent the incarnations of Vishnu, and nymphs sporting with makras or crocodiles. Near this are interesting interior colonnades in the fort walls affording shelter to the garrison. The S., or Nandod, Gate is 29 ft. high and 16 ft. 4 in. wide. Trees have grown in the walls and fractured them with their thick roots. The Hira Gate, in the E. face of the town, is 37 ft. high and a marvel of minute carving. About 10 ft. up, in the N. face of the centre, a man and woman are carved, 4 ft. high, standing with a tree between them, like the old representations of Adam and Eve. To the left is the tall figure of a devil, with a ghastly leer. High in the centre face is an elephant,

under which the builder of the gate is said to have been interred. On the N. side of the town is the former palace, in which the law courts now sit. On this side there is a fine tank and the Mori Gate. On the left, looking out from inside the tower, is the temple of Maha Kali, and on the right, beyond the gate and inside it, is a smaller temple, now in ruins. The former is a wondrous example of carving, which when new must have been very beautiful, but is now much worn by the weather.

From Dabhoi a branch railway runs 10 m. S. to **Chandod** station, a celebrated place of Hindu pilgrimage, owing to its situation at the confluence of the *Narbada* and the *Or*. Thousands flock there every full moon.

Another line runs from Dabhoi 22 m. E. to Bodeli, and thence to Chota Udaipur, the capital of the State of that name (not to be confused with the great Rajput State of Udaipur or Mewar); a third to Samlaya; and a fourth to Vishvamitri on the main line of the B.B. and C.I. Railway. From Vishvamitri, a line runs S.W. to Jambusar and thence to Broach.

248 m. from Bombay is **BARODA*** (D.B., $\frac{1}{2}$ m., R.), the capital of the very important Mahratta State of the Gaekwar, which with its dependencies covers an area of 8135 sq. m., with a population of 2,126,522 and an annual revenue of 237 lakhs. H.H. Maharaja Sir Sayaji Rao III. Gaekwar, G.C.S.I., G.C.I.E., the present ruler, was born in 1863 and succeeded in 1875. The principal Gaekwars have been: Damaji, the founder of the State, who died in 1721; Damaji II. (1732-1770), Sayaji Rao II. (1819-1847), and Malhar Rao, who succeeded him and was deposed in 1874.

W. of the railway station are situated the residences of many

¹ See *The Antiquities of the Town of Dabhoi in Gujarat*, by J. Burgess and H. Cousins (1888). The book, however, is scarce.

high officials, and the State Rest-House (or Baroda Hotel, as it is now called) for guests of H.H., as well as for visitors to Baroda. E. of the station is the city (pop. 94,712), with the fine College, Museum, the *Baroda General Hospital*, the *State Offices and Library*, the Juna Kot, the *Central Jail*, etc. The Vishva-mitri River flows W. of the town, and is spanned by four stone bridges, which exhibit great contrasts of style. The city proper is intersected at right angles by two wide thoroughfares, which meet in a market-place, where there is a fine pavilion of Muhammadan architecture, a clock tower, and the old Nazar Bagh Palace. The gold and silver guns of the State are kept in the L.F. Battery. The gold gun contains 280 lb. weight of solid gold, and is drawn by splendid milk-white bullocks, stabled hard by. The *Lakshmi Vilas Palace*, which is built in the Indo-Saracenic style of architecture, cost 60 lakhs of rupees. The present Prince of Wales stayed here on the occasion of his visit to Baroda in 1926. Passes to view it must be obtained from the Khangī Karbari to H.H. the Gaekwar.

N. of the city are the *Cantonment* (where an Indian infantry regiment is quartered) and the *Residency*, well laid out with open, well-planted roads. The *English Church* was consecrated by Bishop Heber in 1824, and in 1838 was almost entirely rebuilt. There is a good public garden with a zoological collection on the banks of the river, between the Cantonment and the city.

Baroda is supplied with water from the artificial *Ajwa Lake*, 18 m. distant, completed in 1892 at a cost of 35 lakhs.

The palace at *Makarpura* is 4 m. S. of the city. The *Naulakhi Well*, 50 yds. N., is a fine structure of the Baoli class.

The *Baolis*, in Gujarat, are large wells. The following account of these is given by Mr A. Forbes in his interesting work on Gujarat, the *Ras Mala*: "There remain in different parts of the country examples of two kinds. Some are large circular wells containing galleried apartments; others are more properly described as *waos*, or *baolis*. The *wao* is a large edifice, of a picturesque and stately, as well as peculiar, character. Above the level of the ground a row of four or five open pavilions, at regular distances from each other, usually square in the interior, but sometimes, in the larger examples, passing into the octagonal form within, is alone visible; the roofs are supported on columns, and are, in the structures of the Hindu times, pyramidal in form. The entrance to the *wao* is by one of the end pavilions; thence a flight of steps descends to a landing immediately under the second dome, which is now seen to be supported by two rows of columns, one over the other. A second flight of steps continues the descent to a similar landing under the third pavilion, where the screen is found to be three columns in height. In this manner the descent continues stage by stage, the number of the columns increasing at each pavilion, until the level of the water is at last reached. The last flight of steps conducts to the most adorned portion of the *wao*, an octagonal structure, in this position necessarily several storeys high, with a gallery at each storey, and covered by a dome. The structure, which is sometimes 80 yds. in length, invariably terminates in a circular well." Another fine *baoli* may be seen at Adalaj (p. 209).

The broad-gauge line of the B.B. and C.I. Rly., which is the quickest route from Bombay to Delhi (865 m.) diverges N.E. to

Champaner Road, 271 m. ; Godhra, 293 m. ; Dohad, 338 m. ; Ratlam, 408 m. ; Nagda, 434 m. ; Kotah, 574 m. ; Siwai Madhopur, 641 m. ; Bayana, 728 m. ; Bharatpur, 754 m. ; and Muttra, 775 m., where it connects with the G.I.P. Ry. (Route 12). An interesting excursion to Champaner and Pava-gadh *via* Champaner Road stn. can be made from Baroda (p. 252) ; it is an all-day trip.

The main broad-gauge to Ahma-dabad continues to

270 m. from Bombay, **Anand** junction.

(a) A branch line from here runs N.E. to **Godhra**, 49 m (p. 253).

At 19 m. (D.B.) **Dakor** station, there are a large lake, and a temple with an image much venerated by the Hindus. As many as 100,000 pilgrims assemble in October and November.

About 20 m. N. of **Dakor** is the walled town of **Kapadvanj** (see below).

Midway between the two places are the hot springs of **Lasundra**, the highest temperature being 115°. The water is slightly sulphurous, and is efficacious in skin diseases.

(b) Another line runs S.W. 14 m. to the town of **Petlad**, and 33 m. to **Cambay** (pop. 27,303). The area of the Muhammadan State of Cambay, of which it is the capital, is 350 sq. m., with a pop. of 71,715 and an annual revenue of nearly 10 lakhs. The ruling Nawab, who is entitled to a permanent salute of 11 guns, was born in 1911 and succeeded in 1915. The town and port are of great antiquity. In A.D. 913 **Cambay** is described by the Arab traveller **Masudi** as standing on the shores of a deep bay surrounded by towns, villages, farms, cultivated fields, trees, and gardens.

It was governed by the kings of **Anhilwara** (the modern **Patan**), up to the end of the 13th century. Muhammadan writers of the period call it the "first city in Hind." The beauty and wealth of the country led to its invasion by the Muhammadan Emperor **Ala-ud-din** in 1304, when the city was plundered and its temples destroyed.

Cambay reached the height of its glory at the latter end of the 15th and beginning of the 16th centuries. Under the Muhammadan Kings of Gujarat (1485-1535) it was one of their chief residences, and they are often known as "Kings of Cambay." In the second canto of *Hudibras* (1674) mention is made of the "Prince of Cambay," whose "daily food is asp and basilisk and toad." Butler is evidently alluding to **Lodovico di Varthema's** remarkable stories of **Mahmud Bigara**, the famous Sultan of Gujarat. In 1583 letters carried by **Fitch**, **Leedes**, and **Newberry** from Queen Elizabeth, were addressed to **Akbar**, as king of Cambay. The Portuguese and Dutch had already established factories here ; in 1613, when the English appeared, it was still a flourishing city, but commenced to decline as **Surat** increased in importance. In the 18th century it was plundered more than once by the **Mahrattas** ; at the same time the entrance to the harbour began to silt up, and it is now an unimportant place.

Cambay was formerly a stronghold of the **Jains**, and still possesses some of their **MSS.**, second only to those at **Patan**. The **Jami Masjid** (1325) was built with fragments of Jain and Hindu temples.

The town is celebrated for the manufacture of agate, cornelian, and onyx ornaments.

The main line continues from **Anand** to

281 m. **Nadiad** junction station. A branch line (metre-gauge) runs N. to Kapadvanji, 28 m. (D.B.), noted for its glass, soap, and leather jars for *ghi*. Nadiad (pop. 31,939) is the most important town in the Kaira district.

291 m. **Mehmadabad** and **Kaira** Rd. station. Picturesque view of river from railway station. In the morning and evening troops of grey monkeys play near the line. Mehmada-bad was founded by Mahmud Bigara in 1479. There is a fine tomb $1\frac{1}{2}$ m. E. of the town, built in 1484 in honour of Mubarak Saiyad, a Minister of Mahmud. "Though small—it is only 94 ft. square, exclusive of the porch—there is a simplicity about its plan, a solidity and balance of parts in the design, which is not always found in these tombs, and has rarely, if ever, been surpassed in any tomb in India."¹ Mahmud Bigara also constructed the *Bhamara Baoli* (well), which is passed on the way to the tomb. It has two stone arches, on which it was said the king's swing was hung. It is 74 ft. long by 24 ft. broad, is entered by four winding stairs, and has eight underground chambers.

Kaira (pop. 7448), 7 m. from Mehmada-bad, (public conveyances—horse-carriages—ply between them) by a good road shaded by fine trees, is the headquarters of Kaira district. It consists of two parts, the town proper and the suburbs. Kaira is said to be as old as 1400 B.C. Copperplate grants show that the city was in existence in the 5th century. The chief industry is printing cloth for saris and other native garments. In the centre of the town is the Court House, a building with pillars of a Greek order. Near it is a Jain temple, with beautiful dark wood carving. Outside

the E. gate is the Jail. Kaira was formerly of importance, being on the main route from Cam-bay to N. India, and the boundary of British possessions. It was a large military Cantonment, but proved so unhealthy for Europeans that the troops were withdrawn. The large church was consecrated by Bishop Heber in 1822, and has a beautiful bell.

Wild hog may still be found in the district, and the nilgai (*Portax pictus*), antelope (*Antelope bezoar-tica*), and Indian gazelle (*Gazella Bennettii*) are common. The *Sarus* (*Ardea Antigone*) is a tall grey crane with a crimson head. Wild-fowl, bustard (*Eupodotis Edwardsii*), and florican (*Sypheotides auritus*), partridges and quails, sand-grouse, plovers and bitterns, pea-fowl and green pigeon, are found everywhere. The mahsir (*Barbus Mosal*) is found in the Maht, Vatrak, Meshwa, and Sabarmati rivers, and affords excellent sport with the rod and fly.

310 m. **Ahmadabad** (strictly correct spelling, but usually spelt Ahmedabad) Jn. * The "Kath-i-awar Mail" proceeds along the broad-gauge section to Viramgam (Route 11). This train connects with the metre-gauge Delhi Mail, which is drawn up alongside.

This most beautiful city, headquarters of the N. Division of the Bombay Presidency, covers an area of 2 sq. m. (274,007 inhabitants), and stands on the left bank of the Sabarmati river, in lat. $23^{\circ} 2'$, long. $72^{\circ} 38'$. The remains of an old wall, with twelve gateways, surround it. No one should pass this ancient capital, the stronghold of the Northern Jains, without pausing long enough (four hours) to visit the Jami Masjid, the *Tombs of the Queens*, and the Rani Sipri Mosque. Sarkhej (p. 182), if possible, should also not be missed.

Ahmadabad, once the greatest

¹ See Fergusson's *Indian Architecture*, 2, 244.

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city in Western India, is said to have been from 1573 to 1600 the "handsomest town in Hindustan, perhaps in the world." In Sir Thomas Roe's time, 1615, "it was a goodly city as large as London." It was founded in 1411 by Sultan Ahmad I., who made Asaval, the old Hindu town, now included in the S. part of the city, his capital. It passed through two periods of greatness, two of decay, and one of revival. From 1411 to 1511 it grew in size and wealth; from 1512 to 1572 it declined with the decay of the dynasty of Gujarat; from 1578 to 1709 it recovered under the Mughals; from 1709 to 1809 it dwindled with them; and from 1818 it has again increased under British rule. It is now one of the most important centres of the cotton trade in Western India. There are 74 mills in it, employing 44,000 hands.

It is supplied with filtered water obtained from wells sunk in the bed of the river; the main streets are supplied with electric light.

The Cantonment lies $3\frac{1}{2}$ m. N.E. of the city, and is reached by a good road lined by an avenue of trees, the haunt of thousands of parrots and large numbers of monkeys, fed by Hindus on Saturdays. Here there is an English Church, and there is another, Christ Church, in the *Idaria Quarter*, 500 yds. S. of the Delhi Gate.

It is hard to account for the scant attention paid to Ahmadabad by modern travellers from Europe. Although Jahangir is said to have called it Gardabad (the city of Dust), it certainly ranks high amongst the cities of India for the beauty and extent of its architectural remains.¹ Its architecture is an interesting and striking example

of the combination of Hindu and Muhammadan forms. "Nowhere did the inhabitants of Ahmadabad show how essentially they were an architectural people as in their utilitarian works (wells—i.e., *Baolis*, and inlets to water reservoirs). It was a necessity of their nature that every object should be made ornamental, and their success was as great in these as in their mosques or palaces" (see Ferguson's *Ind. Arch.*, 2, 241).

The *Jain feeding-places for birds*, called "parabdis" which at the first glance look like pigeon-houses, may be seen in many of the streets, and are a peculiar feature of Ahmadabad; they are extremely picturesque, ornamented with carving, and often gaily painted. Many of the houses in the streets have fronts beautifully ornamented with wood carving.

The old parts of the city are divided into quarters wholly separated off from one another and named "pols." The buildings in the city should be seen in the following order:—

The Jami Masjid and Tombs of Ahmad Shah and his wives; the Rani Sipri Tomb and Mosque; Dastur Khan's Mosque; the Tin Darwaza; the Bhadar Azam Khan's Palace; Sidi Saiyad's Mosque; Ahmad Shah's Mosque; Shaikh Hasan's Mosque; the Rani (or Queen's) Mosque in Mirzapur; Muhafiz Khan's Mosque.

With a second morning to spare, the visitor should start early and see Sarkhej, across the river to the S.W., giving himself at least four hours for the trip. A second afternoon could be devoted to the Kankariya Tank and Shah Alam, S. of the city, and perhaps the modern Jain Temple of Hathisingh, outside the Delhi Gate.

Near the railway station are handsome lofty minarets and an arched central gateway, which are all that remain of a mosque (1)¹

¹ These numbers in brackets refer to the numbers on the accompanying plan.

¹ The amplest details of the architecture of Ahmadabad will be found in a volume of the *Archaeol. Survey of N. India*, by Dr Burgess. See also *Architectural Antiquities of Western India*, pp. 59-66, by H. Cousens, India Society, London, 1926.

which was destroyed when the Mughal commander, Jawad Mard Khan, surrendered Ahmadabad to the Mahrattas in 1753.

The Jami Masjid (3), or principal mosque, stands near the centre of the city, on the S. side of the main street (Manik Chauk), a little E. of the Three Gateways. It was built by Sultan Ahmad I. (Ahmad Shah) in 1424. Ferguson says: "Though not remarkable for its size, it is one of the most beautiful mosques in the East" (*Ind. Arch.*, 2, 230). The mosque is entered from the N. by a flight of steps. On the S. is another porch leading into the street, and on the E. is the enclosure, in which is the tomb of the founder. The court is surrounded by a cloister. To the W. is the mosque proper. On the threshold of the main arch, embedded in the pavement, lies a black slab brought from Chintaman's Temple, which, according to Sir T. Hope, is a Jain idol turned upside down for the faithful to tread on; and touching it on the E. is a white marble crescent, where the Imam stands to pray. In the right-hand corner on entering is a gallery, which was probably used by the members of the Royal Family. The roof, supported by 260 columns, has fifteen cupolas, with galleries round the three in front. The centre cupola is larger and much higher than the others. The two minarets lost half their height in the earthquake of 16th June 1819. They are now 43 ft. high.¹ On the marble slab above the centre of the three *kiblas*, or prayer-niches, are these words in Arabic: "This high and far-stretching mosque was raised by the slave who trusts in the

mercy of God, the compassionate, the alone-to-be-worshipped." The Koran says: "Truly mosques belong to God, worship no one else with Him." "The slave who trusts in God, the Aider, Nasir-ud-dunya, wa-ud-din Abu'l Fath Ahmad Shah, son of Muhammad Shah, son of Sultan Muzaffar."

Through the E. gate is the Tomb of Ahmad Shah (2) (repaired 1587). This domed building has a portico to the S. with eighteen pillars. The windows are of perforated stonework. The central chamber is 36 ft. square. It is paved with marble of different colours. The centre cenotaph is that of Ahmad Shah, the one to the W. is that of his son, Muhammad Shah, and that on the E. is that of his grandson, Kutb Shah, died 1441, 1451, and 1459 A.D.

50 yds. to the E., across the street, are the Tombs of the Queens of Ahmad Shah (2). The houses are so close that they quite shut out the façade of the mausoleum, which is raised on a platform. In the façade are thirteen highly ornamented carved recesses. Inside is a rectangular court, with a corridor running round it. In the centre are eight large cenotaphs and several small ones. The centre tombstone is finely carved, and is the tomb of Mughlai Bibi. It is of black stone or marble, inlaid with white. This building is one of the finest in Ahmadabad, but much out of repair.

Rani Sipri's Mosque and Tomb (4) are almost the most beautiful monuments in Ahmadabad. Rani Asni, by whom the mosque and tomb were really built, was one of the wives of Mahmud Bigara, and they were completed in 1514. "They are the first of a series of buildings more delicately ornate than any that preceded."¹ The mosque has two minarets, about

¹ In 1781 James Forbes, in his *Oriental Memoirs*, said of them: "A circular flight of steps led to a gallery near the top of each. A little force at the arch of the upper gallery made both minarets shake, though the roof of the mosque remained unmoved."

¹ Sir T. Hope's *Ahmadabad*.

50 ft. high, having four compartments tapering up to the top. The roof is supported by a row of six coupled pillars with single ones behind. The rauza, or tomb, is 36 ft. square.

Dastur Khan's Mosque (5), built in 1486 by one of Mahmud Bigara's Ministers. The open stone screen-work that shuts in the cloister round the courtyard is very fine. In the gateway the marks of shot may be seen. This mosque is spoilt by buildings which rest on its walls. A few yards to the E. of Dastur Khan's Mosque is *Asa Bhil's Mound*, the site of the fort of the Bhil Chief, from whom the town of Asaval had its name.

A little to the N.E. of the Jamalpur Gate is **Haibat Khan's Mosque** (6), which is interesting as one of the earliest attempts to combine Muhammadan and Hindu elements. Haibat Khan was one of the noblemen of Ahmad Shah's court. The mosque is very plain. The front wall is pierced by three small pointed arches some distance apart. The minarets are small and without ornament, and rise like chimneys from the roof. The central dome, of Hindu workmanship and of great beauty, is barely raised above the others. The pillars, taken from different temples, display every variety of rich ornament. Except for the form of its dome, the outer porch would suit a Hindu temple.

The **Tin Darwaza**, or **Three Gateways** (7), built by Sultan Ahmad I., is of stone richly carved. It crosses the main street a little to the N. of the Jami Masjid. This gateway led into the outer court of the Bhadar, known as the Royal Square, and was surrounded in 1638 by two rows of palm trees and tamarinds (J. A. de Mandelslo's *Voyages*, 1669, p. 76). Facing the Bhadar Gate is a municipal

garden. N. of the garden is the Middle School, and to the W. the Hemabhai Institute, with a good library and newspapers and periodicals. W. of this Institute—reached by leaving the main road—is the Government Telegraph Office. Near it is the **Mosque of Malik Sha'ban**, with an inscription which records that it was built in the reign of Kutb-uddin, by Sha'ban, son of 'Imad-ul-mulk, in 856 A.H. = 1452 A.D.

The **Bhadar** (8), an ancient enclosure or citadel, built by Ahmad Shah, 1411, and named after the goddess Bhadra, a propitious form of Kali, is occupied by public offices. In the E. face is the **Palace**, built by **Azam Khan** (9), the 23rd Viceroy (1635-42), who was called *Udai*, "the white ant," from his love of building. It is now the Post-Office. S. of the palace are the Civil Court buildings. Over the gate is a Persian chronogram giving the date 1636 A.D. The *N. entrance to the Bhadar* is very handsome. The gate under an archway is 18 ft. high, and opens into a regular octagonal hall of great elegance, containing in the upper storey an arched gallery, having in front a low wall of open-cut stone, and each gallery surmounted by a cupola. Underneath this hall is a fine vaulted chamber, entered by a flight of steps at each side, with a reservoir and fountain in the middle. Close to the Jail is a temple to Bhadra Kali Mata. At the N.E. corner is **Sidi Saiyad's Mosque** (12), which forms part of the wall, and was till lately the Mamlatdar's office. Two of its windows are filled with delicate stone tracery of tree-stems and branches beautifully wrought. Fergusson, who gives an illustration of one of the windows, says in his *Indian Architecture*, 2, 236-7: "It would be difficult to excel the skill with which the vegetable forms are conventionalised just to

the extent required for the purpose. The equal spacing also of the subject by the three ordinary trees and four palms takes it out of the category of direct imitation of nature, and renders it sufficiently structural for its situation; but perhaps the greatest skill is shown in the even manner in which the pattern is spread over the whole surface. There are some exquisite specimens of tracery in precious marbles at Agra and Delhi, but none quite equal to this."

In the S.W. corner of the Bhardar is **Ahmad Shah's Mosque** (10), built by him in 1414, twenty years before the Jami Masjid, being perhaps the oldest here. It is said to have been used as the King's private chapel. The façade is almost bare of ornament, with ill-designed pointed arches. The two minarets are evidently unfinished. The *mimbar*, or pulpit, is adorned with what looks like laurel leaves. The architecture shows the first attempts at building a Moslem edifice in what had been a Hindu city. The pillars still bear Hindu figures and emblems. The N. porch, leading into the latticed ladies' gallery, is Hindu throughout, and may be part of a temple *in situ*. To the left, on advancing towards the mosque, formerly stood the Ganj-i-Shahid, or Stone of Martyrs, where the Moslems killed in the storming of the town were buried.

W. of this mosque is the **Manik Burj** (11), or Ruby Bastion, built round the foundation-stone of the city. There is a small round tomb in the yard near the Collector's office, which is said to be that of Ibrahim Kuli Khan, a Persian warrior.

Shah Wajih-ud-din's Tomb (13), built by Saiyad Murtaza Khan Bokhari, 11th Viceroy, 1606-1609, is a very beautiful monument.

Saiyad Alam's Mosque (14), was built about 1420 by Abubakr Husaini. The inner details are as rich as Hindu art could make them. S. of this 170 yds. is

The **Rani Masjid** (Queen's Mosque) (15) in *Mirzapur*, a few yds. to the S. of the D.B. (now the "Grand Hotel"), built probably in Sultan Ahmad I.'s reign. There are two minarets, unfinished or partly destroyed by an earthquake, and now only 33 ft. high. The roof has three domes, and is supported by thirty-six pillars. To the N.E. of the mosque is the *rauza* or tomb (restored). Under the dome are two cenotaphs of white marble; the central one is the tomb of Rupvati, a Princess of Dhar. It is in good preservation, while that on the W. side is much injured; both are ornamented with the chain and censer, a Hindu device. Fergusson (*Ind. Arch.*, 2, 236) has given a plan of this mosque, and says: "The lower part of the minaret is of pure Hindu architecture. We can follow the progress of the development of this form from the first rude attempt in the Jami Masjid through all its stages to the exquisite patterns of the Queen's Mosque at Mirzapur."

A little to the N. of this mosque is the new Government High School, on the right going N. Opposite the latter, and reached by a bye-street, is a carpet factory, owned by Harilal Bakarbhair & Co., which is worth visiting.

The **Mosque of Shaikh Hasan Muhammad Chishti**, in *Shahpur* (16), is in the N.W. angle of the city, not far from the Sabarmati, 1565 A.D. The minarets are unfinished. "The tracery in the niches of their bases is perhaps superior to any other in the city." On the S. or left side of the central arch is a Persian quatrain. This chronogram gives the date 1566 A.D.

East of the Rani's Masjid is the **Mosque of Muhafiz Khan** (17), built in 1465 by Jamal-ud-din Muhafiz Khan, Governor of the city in 1471 under Mahmud Bigara. It is the best preserved of all the mosques. According to Sir T. Hope, "its details are exquisite," and the minarets of the mosque and those of Rani Sipri "surpass those of Cairo in beauty."

S. of this mosque is the modern **Swami Narayan's Temple** (18), finished in 1850. It has an octagonal dome, supported on twelve pillars, and is a fine building.

Close to it is the **Pinjrapol**, or *Asylum for Animals*. The enclosure is surrounded by sheds, where about 275 animals are lodged. There is also a room where insects are fed. Close to the S. of it are nine tombs, each 18 ft. 3 in. long, called the **Nau Gaz Pir**, "the Nine Yard Saints." They are probably the tombs of a number of men killed in some battle.

The Mosque, Tomb, and College of Shuja' at Khan. This mosque, which stands 400 yds. N.E. of the Lal Gate of the Bhadar, has two slender minarets, and is divided by piers into five bays. Over the kibla are written the breed and date=1695. The walls, up to 6 ft., are lined with marble. The tomb is of brick, with a marble floor, much destroyed. It is called both the **Marble** and the **Ivory Mosque**.

Ahmadabad is celebrated for its **Handicraftsmen**—goldsmiths, jewelers, etc., who carry the *chopped* form of jewellery (the finest archaic jewellery in India) to the highest perfection; copper and brass-workers, as instanced particularly in the very graceful and delicate brass-screens and *pandans* (betel-boxes); carpenters, who have long been famous for their superior carving in *shisham*, or

mongrel blackwood, of which the finest specimens are to be found here; stone-masons, lacquer-workers, carvers in ivory—also for the manufacture of "Bombay boxes"; mock ornaments for idols; leather shields; cotton cloth; calico-printing, gold-figured silks, and gold and silver tissues; *kimkhwab* (*kinkab*), or brocades the noblest produced in India; gold and silver lace and thread, and all manner of tinsel ornaments.

Its industrial importance is shown by the fact that "the *Nagar-Seih*," or city lord, of Ahmadabad is the titular head of all the Guilds, and one of the highest personages in the city.

Carpets have also become a speciality of Ahmadabad, and the manufactories as well as the workshops of the other crafts are well worth a visit.

ENVIRONS.—For 12 m. round Ahmadabad the country is full of interesting ruins; but only the principal can be mentioned. Just outside the Delhi Gate, on the N., is the modern **Hathi Singh Temple** (19), built of white marble and surmounted by fifty-three domes. This and a rest-house and family mansion close by were finished in 1848, at a cost of Rs.1,000,000. The dimensions of this temple are of the first order; and its style pure Jain. In its sculptures may be seen representations of the twenty-four holy men, or Tirthankars, and hundreds of other images, all similar, but each labelled on the base with the emblem of some distinct Jain. The entrance is from a courtyard surrounded by a corridor, where woollen slippers are provided before ascending a portico richly carved and supported by pillars. The temple consists of an outer and an inner chamber, both paved with coloured marbles, chiefly from Makrana, in Rajputana: in the latter is the image of Dharm-

nath, who is represented as a beautiful youth, with a sparkling tiara of imitation diamonds. Fergusson says (*Ind. Arch.*, 2, 66): "Each part goes on increasing in dignity as we approach the sanctuary. The exterior expresses the interior more completely than even a Gothic design; and whether looked at from its courts or from the outside, it possesses variety without confusion, and an appropriateness of every part to the purpose for which it was intended." N.W. of this is the ruined **Tomb of Darya Khan** (20), 1453, chief Minister of Mahmud Bigara. The dome is 9 ft. thick, and the largest in Gujarat. Near this is a hostel, for students of the R.C. High School, built by the late Sirdar Sir Chinubhai M. Ranchhodlal. Not far beyond it is the **Ohota**, or small **Shahi Bagh**, of no architectural interest, now a private house, occupied by the District Superintendent of Police, where it is said the ladies of the royal harem lived. Across the railway line is the **Shahi Bagh**, a very fine garden-house, now the residence of the Commissioner of the Northern Division. A subterranean passage is said to communicate between the two places. The building was erected in 1622 by Shah Jahan, when Viceroy of Ahmadabad, to give work to the poor during a season of scarcity. In the 16th century this was the great resort for the people of the city. The **Shahi Bagh** is close to the railway bridge over the Sabarmati, which river it overlooks. $\frac{1}{2}$ m. S.W. of the **Shahi Bagh** is **Miyān Khan Chishtī's Mosque** (22), built in 1465 by Malik Maksud Wazir; and $\frac{1}{2}$ m. more to the S.W. is **Achyut Bibi's Mosque** (21), built in 1469 by 'Imadu'l Mulk, one of Mahmud Bigara's ministers, for his wife Bibi Achyut Kuki, whose tomb is close by. There were seven minarets here, all of which were thrown down in the earthquake of 1819. Returning from

this point, the drive may be continued to the N.E. side of the city, to Asarva, about $\frac{1}{2}$ m. N.E. of the Daryapur Gate, and close to the Asarva railway station, where are the **Baolis**, or **Wells of Dada Hari** (23) and **Mata Bhawani**. The real name of Dada is said by the local people to have been Halim, "mild," and they call him Dada Hari. He is said to have been the husband of the Dai, or nurse of one of the Kings. There is an ascent from the road to the platform which surrounds the well's mouth. A domed portico, supported by twelve pillars, gives entrance to three tiers of finely constructed galleries below ground, which lead to the octagonal well, with inscriptions in Sanskrit and Arabic. The well beyond the octagonal one has pillars round it and a fence wall. Beyond this is a circular well for irrigation. A very narrow staircase leads to the level ground, where by the side of the well are two stone kiosks. About 50 yds. to the W. is **Dada Hari's Mosque**, one of the best decorated buildings at Ahmadabad, though no marble is employed. The stone is of a dull reddish-grey colour. The bases of the two minarets are richly carved; a portion of them was thrown down by the earthquake of 1819. To the N. is the **Rauza of Dada Hari, or Halim**. The N. door is exquisitely carved, but the inside is quite plain.

Mata Bhawani (24).—This well is about 100 yds. N. of Dada Hari's, but is much older, and is thought to be of the time of Karan, when Ahmadabad was called Karanavati. The descent to the water from the platform is by fifty-two steps and pillared galleries, as at Dada Hari. The porticoes are quite plain, and the well is altogether inferior to that of Dada Hari.

Most of the houses in the **Madhavpura** suburb are warehouses,

and it is the great business quarter. *Saraspur*, E. of the railway station, is a distinct walled town, the largest of the suburbs. In this suburb is the Jain Temple of *Chintaman* (25), restored in 1868 by *Shantidas*, a rich merchant, at a cost of Rs.900,000. *Aurangzeb* defiled it and changed it into a mosque. The Jains petitioned the Emperor *Shah Jahan*, who ordered his son to repair and restore the temple. But in 1666 *Thevenot* speaks of it as a mosque (*Voyages*, 5, 28).

$\frac{1}{2}$ m. S.E. of the Raypur Gate is the *Hauz-i-Kutb*, generally called the *Kankariya Lake* (26), or *Pebble Lake*. This reservoir, one of the largest of its kind in this part of India, is a regular polygon of thirty-four sides, each side 190 ft. long, the whole being more than 1 m. round. The area is 72 acres. It was constructed by Sultan *Kutb-ud-din* in 1451, and was then surrounded by many tiers of cut-stone steps, with six sloping approaches, flanked by cupolas and an exquisitely carved water-sluice. In the centre was an island, with a garden called *Nagina*, or the *Gem*, and a pavilion called *Ghattamandal*. In 1872 *Mr Borrodaile*, the Collector, repaired the building, and made a road from the Raypur Gate. On the E. bank of the lake are some Dutch and Armenian tombs, Saracenic in style, with domes and pillars a good deal ruined. The dates range from 1641 to 1689.

The expedition may be continued to *Batwa*, which is almost 5 m. due S. of the Raypur Gate. Here *Burhan-ud-din Kutb-ul-Alam*, the grandson of a famous saint buried at *Uch* on the *Sutlej*, is interred. He came to the court of Sultan *Ahmad I.*, settled at *Batwa*, and died there in 1452. A vast mausoleum of fine design and proportions was erected to his memory. It resembles the build-

ings at *Sarkhej*, but the aisles are arched and vaulted, and the dome is raised by a second tier of arches. The workmanship is most elaborate, but the building is, unfortunately, much out of repair. Adjoining it are a mosque and tank. In this tomb there is a small log, which (it is said) one night struck the saint's foot. On his calling out and asking whether it was a piece of iron, stone, or wood, the log at once began to contain all the materials mentioned. Many visitors have tried in vain to discover the truth of its substance.

The tomb of *Shah Alam*, the son of the saint buried at *Batwa*, is 2 m. S.E. of the town on the *Batwa* road. Before reaching the tomb the road passes under two plain gateways, and then through one with a *Nakkar Khana* (music gallery) above the archway, and so into a vast court. To the W. is the mosque, which has two minarets of seven storeys, handsomely carved and about 90 ft. high. The tomb of *Shah Alam* is to the E., and is protected by metal lattices; he was a spiritual guide of *Mahmud Bigara*, and died in 1475. To the S. is an assembly hall, built by *Muzaffar III.* (1561-72), and partly destroyed by the British in 1780 to furnish materials for the siege of the city. The tomb is said to have been built by *Taj Khan Nariali*, one of *Mahmud's* courtiers. Early in the 17th century *Asaf Khan* (p. 368), brother of the Empress *Nur Jahan*, adorned the dome with gold and precious stones. The floor of the tomb is inlaid with black and white marble, the doors are of open brasswork, and the frame in which they are set, as well as the space between the door-frame and the two stone pillars to the right and left, are of pure white marble, beautifully carved and pierced. The tomb itself is enclosed by an inner wall of pierced stone. The

outer wall in the N. is of stone trellis-work of the most varied design, and here Shaikh Kabir, renowned for his learning, who died in 1618, is buried. The mosque was built by Muhammad Salih Badakhshi. The minarets were much damaged by the earthquake of 1819, but have been repaired. To the S. of the mosque is a tomb like that of the chief mausoleum, where the family of Shah Alam are buried. Outside the wall to the W. is a reservoir built by the wife of Taj Khan Nariali, now known as Chandola tank, which has been greatly improved by the Gujarat Irrigation Department, and is now a main source of irrigation.

Sarkhej is 6 m. to the S.W. of the Jamalpur Gate, whence a good carriage will take two people comfortably in about an hour; motors also available. Sarkhej is served by the railway line to Dholka (p. 209), but the service is not likely to be suitable to visitors. The road crosses the Sabarmati river (the channel of which is about $\frac{1}{2}$ m. broad, but the water in the dry weather is only 2 ft. deep) on a massive iron bridge of fourteen spans, called the Ellis Bridge. On the left bank is the Victoria Garden, of which the site was given by Government to the city, with a marble seated statue of Queen Victoria by Mr G. A. Mhatre. The river-bed is dotted with enclosures for the cultivation of melons, potatoes, and other vegetables, and the running water is lined with gaily-dressed women washing their clothes. Garments of every shape and of the brightest colours are laid out to dry. These persons are not professional washerwomen, but belong to many classes of society. The remains of an old bridge will be seen to the S. of the Ellis Bridge; both the road and the old railway bridges were carried away by the great flood in

1875. Near the bridge the city wall is from 40 ft. to 60 ft. high. Near the other end of the bridge is the Gujarat College. Close by, is the fine building of the Science Institute, built by the late Sirdar Sir C. M. Ranchhodlal. The road on the other side of the river is good, with rich fields on either side, and at $2\frac{1}{2}$ m. left is the massive brick **Mausoleum of 'Azam and Mu-'azzam**, built probably in 1457. These brothers are said to have been the architects of Sarkhej, and to have come from Khorasan. The immense structure which contains their tombs is raised on a platform. About 300 yds. from the principal buildings at Sarkhej there are two brick towers about 30 ft. high, the bases of which, close to the ground, have been so dug away that it seems a miracle they do not fall. After another 200 yds. the road passes under two arches, leading into the courtyard of Sarkhej. To the left, on entering is the fine mausoleum of **Mahmud Bigara**¹ and his sons, and connected with it by a beautiful portico another equally magnificent tomb on the border of the tank for his Queen Rājabai. To the right is the **Tomb of the Saint Shaikh Ahmad Khattu Ganj Bakhsh**, called also Maghrabi. Ganj Bakhsh lived at Anhilwara, and was the spiritual guide of Sultan Ahmad I., and a renowned Muhammadan saint; he retired to Sarkhej, and died there in 1445 at the age of 111, and this magnificent tomb and mosque were erected to his memory. The tomb is the largest of its kind in Gujarat, and has a great central dome and many smaller ones. Over the central door of the tomb is a Persian quatrain. It gives the date 1473 A.D. The shrine inside is octagonal, surrounded by finely-worked brass lattice-windows. The pavement is of coloured marbles, and the dome inside

¹ Reigned 1459-1513 A.D. Bigara means with horn-like moustaches.

richly gilt; from it hangs a long silver chain, which once reached to the ground. The vast adjoining Mosque is the perfection of elegant simplicity: it has ten cupolas, supported on eighteen rows of pillars. The whole of these buildings, says Fergusson (*Ind. Arch.*, 2, 235), "are constructed without a single arch; all the pillars have the usual bracket capitals of the Hindus, and all the domes are on the horizontal principle." S. of the saint's tomb is that of his disciple Shaikh Salah-ud-din.

Mahmud Bigara excavated the great tank of 17½ acres, surrounded it by flights of stone steps, constructed a richly-decorated supply-sludge, and built at its S.W. corner a splendid palace and harem, which a few years ago were in ruins, but have since been repaired by the Public Works Department.

The Sarkhej buildings form the most beautiful group in Ahmadabad. They belong to the best period of the style, and have the special interest of being almost purely Hindu; with only the faintest trace of the Muhammadan style. Numbers of people formerly bathed, in spite of the crocodiles, in the old tank, which is now dry. A little S. of the lake is the tomb of Baba Ali Sher, a saint even more venerated than Ganj Bakhsh. It is small, ugly, and whitewashed. Close by are the remains of Mirza Khan Khanan's Garden of Victory, laid out in 1584 after his defeat of Muzaffar III., the last Ahmadabad King. In the 17th century Sarkhej was so famous for indigo that in 1620 the Dutch established a factory there.

8. mi. N. of Ahmadabad is the beautiful and celebrated *wao vasli* (p. 198), or well of Adalaj. There is a model of it in the Bodleian Library at Oxford.

From Ahmadabad main station a line branches off to the N.E. to

Khed-Brahma through Parantij (41 m.) and Himmatnagar (55 m.), the capital of Idar State, which covers an area of 1669 sq. m., with a pop. of 226,355 and an annual revenue of nearly 15 lakhs. The famous Sir Pertab Singh, who was three times Regent of Jodhpur (p. 215), was Maharaja of Idar from 1901 to 1911, when he abdicated in favour of his nephew and adopted son, the present Maharaja, H.H. Lt.-Col. Sir Daulatsinghji, K.C.S.I., who was born in 1875.

Leaving Ahmadabad, the railway crosses the Sabarmati River quite close to the Shahi Bagh on a fine bridge, which carries the rails for both gauges and a footway on one side.

From Ahmadabad to Delhi by the B.E. and G.I. Ry. metre-gauge line.

At 314 m. Sabarmati junction station the metre-gauge continues N. to Delhi, whilst the broad-gauge turns W. for Viramgam and Kathiawar (Route 11). There is also a branch line to the S.W. passing Sarkhej (above) to Dholka (35 m.).

The country going N. is flat and well cultivated.

326 m. Kalol; branches, 30 m. N.E. to Vijapur, and 17 m. N.W. to Bhojani Rd.

353 m. Mehsana junction station. This is one of the most important railway centres in Gujarat, as it is the junction for three branch lines constructed by the Gaekwar of Baroda. They are: (1) a line passing through Kheralu to Taranga Hill, 53 m. N.E.; (2) a line through Patan, the historic capital of Gujarat, to Kakosi Metrana Rd., 50 m. N.W.; (3) a line to Viramgam (p. 233), 41 m. S.W., which connects the Rajputana and Kathiawar metre-gauge lines of railway.

On these branch lines two places only need be noticed.

Vadnagar, 21 m. N.E. on the line to Taranga Hill (population 11,671). This place, once very important as the site of Anandpura, is stated to have been conquered by a Rajput Prince from Ajodhya in 145 A.D. There are some interesting ruins, including a very fine Kirtti Stambha gateway, and the *Temple of Hatheswar Mahadeo* is worth a visit. It is now the religious capital of the Nagar Brahmans, a most influential class of men in Gujarat and Kathiawar. In former years it was the chartered refuge of a class of robbers known as Dhinoj Brahmans.

Patan, 25 m. N.W. of Mehsana (population 27,017). The city stands on the site of the ancient *Anhilwara*, capital of the Hindu Kings of Gujarat, which was taken by Mahmud of Ghazni on his way to attack the temple of Somnath in 1024 A.D. The site for generations has been a quarry, from which beautiful carved stones have been carried to other places. It is still famous for its libraries of Jain MSS. There are no less than 108 Jain temples here.

On the main line is,

366 m. Unjha station. A town in the Baroda State, and the headquarters of the Kadwakanbis, a peculiar caste of agriculturists. Marriages among them take place but once in eleven years, when every girl over forty days old must be married on one or other of the days fixed. Should no husband be found, a proxy bridegroom is sometimes set up and married to a number of girls, who immediately enter a state of nominal widowhood until an eligible suitor presents himself, when a second marriage takes place.

374 m. Sidhpur station (population 16,187) on the Sarasvati

river. The place is of extreme antiquity, and contains the ruins of *Rudra Mala*, one of the most famous ancient temples in W. India. It was wrecked by Ala-ud-din Khilji in 1297, and much of it has been carried off since for building purposes. The stones are gigantic and the carving superb, but very little of it remains. A row of small temples has been converted into a mosque. The more modern temples are very numerous. *Kadi*, the N. division of the Baroda State, in which Sidhpur is situated, is the only part of the whole of the Bombay Presidency in which poppies are allowed to be grown. The opium is manufactured in Sidhpur at the State Stores.

393 m. Palanpur station (R., D.B.). The chief town of a Muhammadan State of that name, and the residence of a Political Agent. The Palanpur State covers an area of 1766 sq. m., with a pop. of 236,694, and an annual revenue of nearly 10 lakhs. The present (1928) Nawab, Capt. H.H. Sir Tale Muhammad Khan Sher Muhammad Khan, K.C.I.E., K.C.V.O., was born in 1883 and succeeded in 1918. He is entitled to a permanent salute of 13 guns. Ry. 18 m. N.W. to Deesa on the river Banas: formerly a British military Cantonment, but since 1928 included in the Palanpur State.

425 m. Abu Road station * (R., D.B.). Well-built railway quarters, with small town. Mount Abu looks down on it from the N.W.

The excursion to Mount Abu is one of the most interesting in India on account of the Jain temples. The ascent to it, 17 m., is by a good road, practicable for motor cars (cost Rs.22), which should be ordered beforehand by telegram. Rooms should be secured beforehand at the Rajputana Hotel, or the Govt. D.B. (Apply for the latter to the District Magistrate,

Mt. Abu). The Dilwara temples can be visited only from noon to 6 P.M.—pass necessary from the District Magistrate, Mount Abu. Though part of the Aravalli range, which runs up to Delhi, Abu is detached from that chain by a valley about 15 m. wide. The plateau at the top is about 14 m. by 4 m., and varies in height from 4000 ft. to 5600 ft.

Mount Abu * (3800 ft. above the sea) is the headquarters of the Rajputana administration, and the residence of vakils, or agents; from the States comprised within that Agency. It is also a sanatorium for European troops and a hot-weather resort in the summer season. The hill is actually within the territory of the Maharao of Sirohi, H.H. Sir Sarup Ram Singh Bahadur, K.C.S.I., a Chauhan Rajput of the Deora sub-clan (born 1888, succeeded 1920), and is held on a permanent lease. The killing of cows is strictly prohibited, as elsewhere in Rajputana, and no beef can be obtained, nor must it be imported in any form. The climate is apt to be cold in winter.

At Mount Abu are the Residency, *Church, Laurence School* for the children of soldiers, *Barracks, Club, Bazar* of shops, and many, private houses on the margin of the *Nakki Tal*—a most charming piece of artificial water studded with islands, and overhung by a curious rock that looks like a gigantic toad about to spring into the water. Many of the Rajputana chiefs have palaces here, and the Agent to the Governor-General for the Western States comes up from Rajkot for the hot weather. A High School is outside the station on the plateau. The wife of Sir Henry Lawrence is buried in the cemetery. The surface of Mount Abu is very much broken up, and the carriage roads are confined to the civil and military station, but there are many bridle-roads and picturesque foot-paths. The views

over the plains from various points are exceedingly fine. The most accessible is called *Sunset Point*, S. of the lake, and is approached by a good road. An attack was made on the place on 21st August 1857 by mutineers from the Erinpura force but was beaten off.

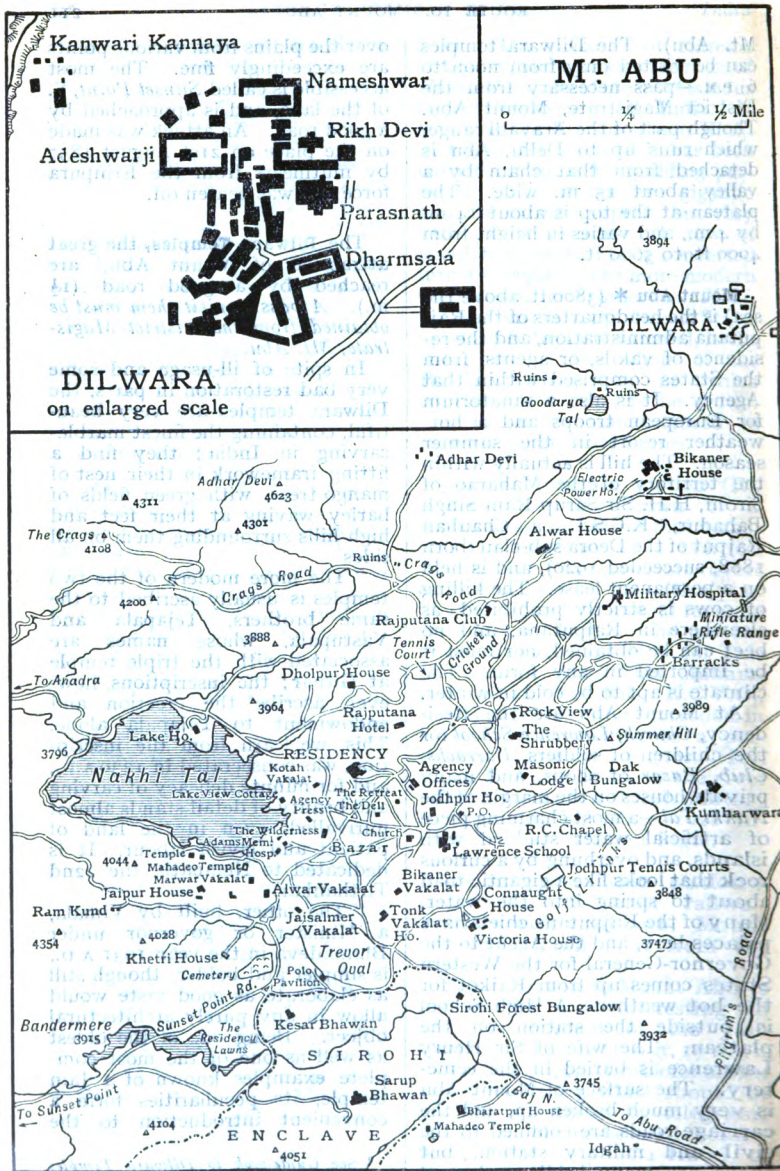
The Dilwara Temples, the great attraction of Mount Abu,¹ are reached by a good road (1½ m.). *A pass to visit them must be obtained from the District Magistrate, Mt. Abu.*

In spite of ill-usage and some very bad restoration in parts, the Dilwara temples are very beautiful, containing the finest marble-carving in India; they find a fitting framework in their nest of mango-trees, with green fields of barley waving at their feet and high hills surrounding them on all sides.

"The more modern of the two temples is usually ascribed to the same brothers, Tejapala and Vastupala, whose names are associated with the triple temple at Girnar; the inscriptions, however, ascribe the erection and endowment to Tejapala alone. This, we learn from the inscription, was consecrated in 1230 A.D., and for minute delicacy of carving and beauty of detail stands almost unrivalled, even in the land of patient and lavish labour. It is dedicated to Nemnath, the 22nd Tirthankar.

"The other, built by Vimala, a Minister or governor under Bhimadeva in the year 1031 A.D., is simpler and bolder, though still as elaborate as good taste would allow in any purely architectural object. Being one of the oldest as well as one of the most complete examples known of a Jain temple, its peculiarities form a convenient introduction to the

¹ See *Guide-book to Dilwara Temples and other Antiquities of Mt. Abu*, by the late Col. C. E. Luard.



style, and serve to illustrate how complete and perfect it had already become when we first meet with it in India.

"The principal object here, as elsewhere, is a cell lighted only from the door, containing a cross-legged seated figure of the Jina to whom the temple is dedicated—in this instance Rishabhanath, or Adinath. The cell terminates upwards in a sikhara, or pyramidal roof, which in these Abu temples, however, are too low to be properly designated spires. To this, as in almost all instances, is attached a mandapam, or closed hall, and in front of this a portico, in this instance composed of forty-eight free-standing pillars; and the whole is enclosed in an oblong courtyard, 128 ft. by 75 ft. inside, surrounded by a double colonnade of smaller pillars, forming porticoes, to a range of cells, as usual fifty-two in number, with some extra chapels at the S.W. corner; these enclose it on all sides exactly as they do in Buddhist viharas. In this case, however, each cell, instead of being the residence of a monk, is occupied by one of those cross-legged images of Jinās which belong alike to Buddhism and Jainism. In other religions there may be a great number of separate chapels attached to one building, but in no other would fifty-two be found, as in this example, each containing an image of a Tirthankar, and all so nearly identical as to be almost undistinguishable. With the Jains it seems to be thought the most important point that the Jinās, or saints, are honoured by the number of their images, and that each principal image should be provided with a separate abode. The long beams, stretching from pillar to pillar, supporting the dome, are relieved by curious angular struts of white marble, which, springing from the lower capital, seem to support the middle of the beam." (Fergusson, *Indian Architecture*, 2, 36-38.)

Achilgarh is reached by following the road past Dilwara for about 4 m. to the village of Uria, where there is a bungalow. Application for its use should be made to the District Magistrate at Mount Abu; no supplies are available and there is no Khansama. From this a road turns right for another 1 m. to the first temple. It is surrounded by a wall, approached by a flight of steps, and beautifully ornamented. S.E. of this are other temples on higher ground overlooking the valley. The view is magnificent. These are the buildings seen on the right during the ascent from Abu Road. S. of the first temple is a large tank, generally empty. On the bank is a marble image of Pramār with his bow, and near him three large stone buffaloes pierced through the middle. The legend is that this tank was once filled with *ghi*, and these buffaloes came every night to drink it up—till they were all shot through by one of Pramār's arrows. This figure is superior in style and treatment to most; and the same may be said of the statues in other temples around the Hill of Abu, specially of the brass figure at Gaumukh, alluded to below. The Achilgarh group is perhaps as attractive as the more renowned temples at Dilwara, though not comparable in size or finish; but the absence of modern work, and an air of antiquity, solidity, and repose, make them worthy of all admiration.

Around Mount Abu in the plain and on the hillside are other temples, all charmingly situated; but a visit to these should not be attempted without a guide or person who knows the country intimately. It is dangerous to leave the beaten path on the sides of Abu on account of bears and panthers.

Guru Sikhur (5646 ft.) is the highest point of Abu. A night should be spent at the Dak Bun-

galow at Uria, near Achilgarh (food and rugs must be brought), and the ascent made in the early morning, with a local guide. A small shrine marks the summit. The view is magnificent.

Gaumukh is a beautifully situated temple 500 ft. down the S.E. slope and 3 m. from the church. It is reached by a path through the hills, behind the High School buildings, along the main road to the plains. There is a brass figure facing the temple. This place is famous for the *Agni Kund*, in which the five tribes of the Rajputs claim to have been created by the gods, in order to counteract the arrogance and tyranny of the Kshatriyas. (Tod wrongly located this *Agni Kund* at Achilgarh).

Gautama lies on the S. side of the hill, W. of Gaumukh; 5 m. from Mount Abu. Lovely view.

Rishi Krishna, at the foot of the hill, S.E. side, 14 m. from the Civil Station, is easily visited from Abu Road Railway Station where cars can be hired.

476 m. from Bombay is *Erinpura Road* for the Cantonment of *Erinpura*, lying 6 m. W. (so called by Captain Irving after the land of his birth). The Jodhpur legion there, in 1857, mutinied on 23rd August, but spared its officers. Two weeks later it defeated the troops of the Jodhpur State sent against them, and finally started for Delhi. It was intercepted on 16th October at Narnaul (p. 232), and defeated by Colonel Gerrard, who lost his life in the engagement.

487 m. *Falna Stn.* 25 m. E. is the famous marble temple of *Sadri*, which is really at *Ranapur* or *Rampura*, 5 m. S. of *Sadri*, built by the *Kumbha Rana* in 1440, in a lonely and deserted glen running into the western slope of the hills below *Kumbha's* favourite fort of *Kanalmer*. "Notwithstanding former neglect, it is still nearly perfect and is probably the most com-

plicated and extensive Jain temple in India, and the most complete for the ritual of the sect" (Fergusson, *Ind. Arch.*, 2, 45-6). It can be visited only by riding, and with the assistance of the officer commanding at *Erinpura*. It is not open to the public, but if previous intimation is received, the local magistrate (*hakim*) of the *Marwar Darbar* stationed at *Bali* can afford facilities.

528 m. from Bombay is *Marwar junction station*.

Marwar Junction to Hyderabad (Sind) and Karachi.

From *Marwar Jn.* the *Jodhpur Railway* branches N.W. to (44 m.) *Luni junction*, from which it continues 309 m., through a desolate country to *Hyderabad (Sind)*. *Balotra* (50 m.) is the *jn.* for the salt-works at *Pachbadra* (10 m. farther on). This is the route taken by the B.B. and C.I. Ry. *Sind Mail*, which runs from *Ahmadabad* on the metre-gauge *via* *Marwar Jn.* and *Luni* to *Hyderabad* in 15½ hrs. and to *Karachi*, 420 m. from *Luni Jn.* in 21 hrs. Transshipment is necessary at *Hyderabad*, where connection is made with the broad-gauge N.W. Ry. line. The through journey from *Bombay* to *Karachi* (992 m.) takes 40½ hours. A refreshment car is attached to the mail trains on this line, which forms the most direct railway route between *Bombay* and *Karachi* (steamers take 38 hours, For *Sind* see *Route 19*).

Marwar Junction to Jodhpur and Merta Road.

Another branch runs 20 m. N. from *Luni Jn.* to *Jodhpur*. Many miles before reaching *Jodhpur* the fort can be distinguished rising abruptly out of the bare plain.

64 m. from Marwar junction is JODHPUR station (D.B.), the capital of the Rajput State of that name, and of the country known as Marwar; it is the residence of the Chief and of a Resident. Permission can be had from the Mahkama Khas to see the fort. There is a good D.B. near the railway station, and carriages are available on hire to see the sights of the city and its neighbourhood. Branch line, 81 m. N. to Phalodi.

The *State of Jodhpur, or Marwar*, covers an area of 35,000 sq. m., with a population of 1,841,000 (1921); the revenue of the State is over 130 lakhs. The State was founded from Kanauj, after the defeat of the Rathors there in 1211. The city was built by Rao Jodha in 1459, and from that time has been the seat of Government. From Rao Jodha are descended, not only the present ruling family of Marwar, but the princes of Bikaner, Kishangarh, Idar, Ratlam, Jhabua, Sailana, and Sitamau. (The last four States are in the Central India Agency.) Rao Udai Singh (d. 1581) received the title of Raja from Akbar, and his son, Sawai Raja Sur Singh (d. 1595), conquered Gujarat and the Deccan for that Emperor. Maharaja Jaswant Singh (d. 1678) commanded the armies of Shah Jahan and Dara Shikoh against the forces of Princes Aurangzeb and Murad in 1658, and died in Kabul, commanding the Imperial Forces there. His son, Maharaja Ajit Singh (d. 1679), drove the Moguls out of Ajmer, and Maharaja Abhai Singh (d. 1724) took Ahmadabad.

During the reign of Maharaja Man Singh (1803-43) a treaty was concluded with the British in 1818. Maharaja Sir Takhat Singhji Sahib Bahadur, G.C.S.I. (1843-73), rendered loyal service during the Mutiny. His eldest son Maharaja Sir Jaswant Singhji Sahib Bahadur II, G.C.S.I. (1873-95) was a vigorous, enlightened and generous ruler. The Resident from 1880

to 1892, Col. P. W. Powlett, is gratefully remembered. Maharaja Sir Sardar Singhji Sahib Bahadur, G.C.I.E., succeeded in 1895, received full powers in 1898, and died in 1911. His Imperial Service Lancers served on the Frontier (1897-98) and in China (1900-01). Maharaja Sir Sum-mair Singhji Sahib Bahadur, K.C.I.E., succeeded as a minor in 1911: he served in the Great War on the Western front. On his death in 1918, Major H.H. Maharaja Sir Umed Singh Bahadur, K.C.S.I., K.C.V.O., the present Maharaja, who was born in 1903, succeeded and received full powers in 1923. From the days of Maharaja Sir Jaswant Singh, his brother the late Lieut.-General Maharaja Sir Pratap Singhji Sahib Bahadur, G.C.B., G.C.S.I., G.C.V.O., LL.D., D.C.L., A.D.C. of Idar, was Chief Minister or Regent. Sir Pratap Singh, who died in 1922, was Maharaja of Idar (p. 209) from 1901 to 1911, and was famous throughout India, as a great soldier-statesmen. He paid several visits to London and took part in Queen Victoria's Jubilee procession. During the Great War, he gave his personal services with the Jodhpur Imperial Service Lancers.

The city (pop. 73,480) stands on the S. end of a range of sandstone hills running E. and W., and is surrounded by a strong wall nearly 6 m. in extent, with seven gates, each bearing the name of the town to which it leads. Some of the houses and temples in the city are of stone richly carved. Amongst the most important buildings are the *Temple* in the Dhan Mandi (grain market), and the *Talaiti Mahal*, an old palace now used as the Jaswant Female Hospital.

The *Fort* stands up boldly some 400 ft. above the city and the plain, and presents a magnificent appearance. The rock is on every

side scarped, but especially at the S. end, where the palace is built on the edge of a perpendicular cliff at least 120 ft. high. Strong walls and numerous round and square towers encircle the crest of the hill. A modern engineered road winds up the neighbouring slopes to a massive gateway. Here is the first of seven barriers thrown across the zigzag ascent, having immense portals with separate guards at each. On the wall of the last are represented the hands of fifteen widows of the Maharajas, who underwent *sati* at their deaths.

At the top of the rock are the highly interesting *Old Palaces*. There are courtyards within courtyards, all solidly built and surrounded by lattice windows of the most delicate and beautiful designs. Here in the *Jewel house* are the Maharaja's jewels—a wonderful collection, and well worth seeing. Some of the pearls, emeralds, and diamonds are unusually fine. The silver trappings for elephants and horses should also be noticed. The view from the palace windows is most interesting and extensive, and shows the town nestling under the huge rock. The cenotaph to the N. was erected to the memory of Maharaja Sir Sardar Singh.

There was formerly great scarcity of water in the fort, and the women had daily to walk all the way to Mandor (see p. 217) to fetch it, but now it is brought up to the top of the fort in pipes. There is a well in the fort 450 ft. deep. The principal Tanks are—the *Padam Sagar* Tank, in the N.W. part of the city, excavated out of the rock, but of small size; in the same quarter is the *Rani Sagar*, at the foot of the W. entrance into the fort, with which it is connected by outworks, and is chiefly reserved for the garrison and ladies residing in the fort; the *Gulab Sagar*, to the E., is handsomely built of stone, and is capacious, with a smaller one

adjoining it; the *Baiji ka Talao*, S. of the city, is extensive, but not capable of holding water long; outside the city 1 m. W. is a lake called *Akherajji ka Talao*, which is a fine sheet of water—clear, deep, and extensive, resembling rather a natural lake than an artificial tank. The *Kailana* Tank, close to the last-named, is the largest of all, with a capacity of 191 million c. ft. of water. The project owes its conception to Sir Pertab, and is now the greatest storage of drinking-water in Jodhpur. Farther N. is the old Residency, a fortified mansion among the hills. 3 m. N. of the city is the *Bal-Samand*, a pretty tank, with a palace on the embankment and garden below, used by the Maharaja as a summer residence. The canal from it to the city is a work of much importance.

The chief sport near Jodhpur is *pig-sticking*, the animals being preserved by the Maharaja.

S.E. of the city are the *Raika-bagh* Palace, where H.H. Maharaja Sir Jaswant Singh resided, and the *Jubilee Buildings*, or public offices, near it, designed by Colonel Sir S. Jacob in the Indian style. They are extensive and beautiful, and deserve attention. 5 m. to the S.W. is the school for the education of the sons of nobles and Rajputs, a handsome building.

The palace of the present Chief is 2 m. farther S., at Ratanada.

The Public Gardens and fine stone houses of the officials have now replaced the barren tract that formerly bounded the city on the S. side.

At about 1½ m. outside the N.E. angle of the city is a small walled town of 800 houses, called the *Mahamandir*, or "great temple." The roof of the temple is supported by 100 pillars, and the interior is richly decorated. This town is

defended by a stone wall, with a few bastions. In it are two palaces, in one of which the descendants of the spiritual adviser of the late Maharaja Man Singh live. The other is reserved for the spirit of his predecessor, whose bed is laid out in a state chamber, with a golden canopy over the pillow, and has no living occupant. The priests, called *Naths*, have lost nearly all their former prestige.

Mandor.—This was the capital of Marwar before the foundation of Jodhpur. It is situated about 5 m. to the N. of Jodhpur. The place is entered through a gate, which encloses a well-kept garden, used as a picnic ground. To the right are some of the *Chhatris*, or cenotaphs of the former rulers, erected on the spots where the funeral pyres consumed their remains. Some are fine, massive buildings, that dedicated to *Ajit Singh* (died 1724) being the largest and finest. These "proud monuments," as Colonel Tod calls them,¹ are built of "a close-grained free-stone of a dark brown or red tint, with sufficient hardness to allow the sculptor to indulge his fancy. The style of architecture here is mixed, partaking both of the Saivite and the Buddhist, but the details are decidedly Jain, more especially the columns." On the left of the entrance road is a pantheon called the *Shrine of the 300,000,000 gods*, containing a row of gigantic painted figures of divinities and heroes. At the end of the long building where these figures are arranged is a curious fresco of a sea-piece. Near this is the stone palace of *Abhay Singh*, who succeeded *Ajit Singh* in 1724. It is now quite deserted. There are some fine bits of trellis screen-work in the garden. By passing through the garden and climbing up a broken flight of steps, the rocky plateau is reached, the site of the

ancient city. It is covered with heaps of debris, in the midst of which is a large ruined temple. Further on is a shabby Moslem shrine, and beyond this a group of *Chhatris* of the relations of the ancient Chiefs. Some are fallen into ruin. Beyond are the *Panch Kund*, or five small tanks, recessed naturally in the rock. Otherwise, little of the old city has left any trace behind.

125 m. N.W. of Jodhpur lies **Jaisalmer**, the capital of the *Bhati* Rajputs of the western desert, founded by Jaisal in 1156 A.D. It is famous for buildings constructed of yellow-brown stone, and for its handsome Jain temples. The Fort is said to be the only bastioned fort in India. The desert track from the South, though bad, is practicable for motors, forming a link with the railway (Guest House for State visitors: no D.B.).

The present Maharawal of Jaisalmer, H.H. Sir Jawahir Singh Bahadur, K.C.S.I., was born in 1882 and succeeded in 1914. The area of the State is 16,062 sq. m., with a pop. of 67,652, and an annual revenue of nearly 4½ lakhs.

64 m. from Jodhpur and 128 m. from Marwar junction is **Merta Road** junction for *Bikaner* and *Bhatinda*. **Merta**, a fortified Marwar town of some importance, is 9 m. S.E. and connected by a branch line of railway from Merta Road Jn. Near this town was fought a decisive battle on the 8th September 1790, between the disciplined battalions of *Mahdaji Rao Scindia*, under the famous *Benoit de Boigne*, and the forces of the Maharajas of Jodhpur and Jaipur. The Rajputs fought with desperate valour: "It is impossible," wrote de Boigne, "to describe the feats of bravery performed by the forlorn hope of the enemy, the *jard Kapra wallahs*" (men in yellow raiment, the garb of doom); but,

¹ For full details see *Tod's Rajasthan*, ii. 835 (Oxford edition, 1920).

in spite of their repeated charges, they were totally defeated. Close to the station is an enclosed Jain monastery, one of the most famous for sanctity.

Merta Road to Bikaner.

35 m. from Merta Road is **Nagaur**. A fortified town of importance in Marwar (pop. 10,227). The crenellated wall, houses, and groups of temples make an agreeable break in the monotonous desert.

107 m. from Merta Road is **Bikaner**, the capital of the Bikaner State in Rajputana. The city was founded in 1488 by Rao Bikaji, second son of Rao Jodhaji, of the royal house of Jodhpur, a Rajput of the famous Rathor clan, from whom the present house of Bikaner is descended.

Major-General H.H. Maharaja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., K.C.B., L.L.D., A.D.C., was born in 1880, and succeeded in 1887. Few Indian princes are better known in Europe than His Highness, who is the 21st Chief. He attended the Imperial War Conference in 1917 and 1919 as a representative of India, and was a member of the War Cabinet and a British Empire delegate at the Peace Conference. He is entitled to a salute of 19 guns.

The State has an area of about 23,000 sq. m., a population of about 700,000 and an annual revenue of nearly 84 lakhs. The Bikaner country consists largely of desert, and water is only found at a depth of 150 ft. to 300 ft. The wells are lined with camel bones. The population is chiefly agricultural, and a fine breed of sheep, much valued for their wool, is produced. The Bikaner camels are well known, and the State Camel Corps distinguished itself in China under the command of the Maharaja in 1900, and in Somaliland in

1903-4. It was also sent to Egypt during the War in 1914-15. The State forces also include a regiment of light infantry, a regiment of Lancers, a camel pack-battery, and a motor machine-gun section. The climate in the cold months is extremely dry and invigorating. In the city itself and in the large towns reside numbers of wealthy Marwari merchants, who have business connections all over India.

The city is situated on an elevation, and has an imposing appearance, being surrounded by a battlemented wall, and possessing many fine buildings. It is the fourth largest city in Rajputana. The stone carving with which many of the houses are faced is unique.

The *Fort*, containing the old palaces, lying to the N.E., outside the city, was begun in the 16th century by Raja Rai Singh (1571-1611), one of Akbar's most distinguished generals. It is 1078 yds. in circuit, and the view from outside is picturesque in the extreme. The palace buildings are the work of successive rulers, and are of every style and period. Among the finest are the Chaubara, erected by Raja Rai Singh; the Phul Mahal, the Chandra Mahal, the Gaj Mandir, and the Kachcheri—all built by Maharaja Gaj Singh (1745-1788); and specially the Anup Mahal, dating from the time of Maharaja Surat Singh (1788-1828), the Chetar Mahal and Chini Burj of Maharaja Dunga Singh (1872-1887), and the beautiful audience hall, called the Ganga Niwas, built by the present Maharaja, the last being an exquisitely proportioned room of finely carved red sandstone.

The Fort also contains a fine library of Sanskrit and Persian books, and a valuable armoury of ancient European and Eastern arms and armour.

The Private Secretary to the Maharaja should be addressed for leave to visit the palace.

Facing the Fort is the Public

Park, well laid out, and containing memorials to various persons who have been connected with the State in the past and in recent times. There are also many fine modern buildings in the suburbs, among which the Dungar Memorial College, the (Walter) Nobles' School, the King Edward Memorial Road, and the temples completed by the present Maharaja, may be specially marked. Outside the city the principal buildings are the Maharaja's new Palace, called Lalgarh; a magnificent edifice of carved red sandstone, designed by the late Sir Swinton Jacob, the Victoria Memorial Club, the Public Offices, the King-Emperor's Hall—built to commemorate the visit to Bikaner of the present King, when Prince of Wales—the Ganga Risala Camel Corps Lines, and a large hospital.

5 m. to the E. of the city is Devikund, where the *Chhattris* (cenotaphs) of the rulers of Bikaner are situated.

Other objects of interest are *Bandasar*, a Jain temple in the S.W. corner of the city, and dating from before its foundation; a well, 450 ft. deep, near the Fort, now pumped by electrical power, which also lights the whole camp and suburbs; and *Nagrechiji*, 2 m. S., containing an eighteen-armed image, a relic of Kanauj.

A visit should also be paid to the carpet and other manufactories at the Central Jail, for which Bikaner is famous.

The Bikaner Gang Canal, a portion of the Sutlej Valley Irrigation Project, conceived by Lt. Anderson, R.E., in 1854, was commenced in 1925, and opened by Lord Irwin, the Viceroy, in October 1927. It will irrigate 1100 sq. miles of the Bikaner State. From the headworks at Ferozepore to the gates at Shivpur, a distance of 84 m., both the bed and the sides of the canal are lined with concrete. The experiment is the first of the kind to be made in India,

and the canal is the longest lined canal in the world.

Bikaner is connected with Bhatinda (201 m. N.); also with Hissar (191 m. N.E.). Both lines are managed by the State.

From Merta Road stn. the Jodhpur Railway continues N.E. to *Degana*, 155 m. from Marwar Jn., whence there is a branch to Ratangarh connecting with the line to Hissar (p. 352).

201 m. from Marwar junction is *Kuchaman Road*, Jn. of the Jodhpur Ry. and the B.B. and C.I., whence 20 m. to *Phalera* (p. 196), where the main metre-gauge of the B.B. and C.I. Ry. is regained.

Between Kuchaman Road and Phalera is the *Sambhar Lake*, on the border of the Jaipur and Jodhpur States. The surrounding country is arid and sterile, being composed of rocks abounding in salt, and belonging to the Permian system; and the salt of the lake comes from the washing of these rocks. The bottom is tenacious black mud resting on loose sand. The lake is 21 m. long from E. to W. after the rains, when the average breadth is 5 m. from N. to S., and the depth, 1 m. from the shore, is only 2½ ft. The water dries up from October to June, and leaves about an inch of salt in the enclosures, which are constructed only where the black mud is of considerable thickness.

From the 17th century the salt was worked by the Jaipur and Jodhpur Governments conjointly till 1870, when the British Government became lessee of both States. The works are on the E. and N. edges of the lake. The average yearly outturn is from 300,000 to 400,000 tons of salt, and the cost of storage and extraction is ¾d. for every 82½ lbs. When the salt is formed men and women of the Barrar caste wade through the mud and lift it in large cakes into

baskets, in which it is brought to the depôts on the lake-side.

Marwar Junction to Ajmer, Jaipur, Alwar, Rewari and Delhi.

The main metre-gauge line of the B.B. and C.I. Ry. to Delhi proceeds from Marwar junction (p. 214) towards Ajmer. After leaving

33 m. from Marwar junction, 561 m. from Bombay, **Haripur** station (D.B.), the line engages in a rocky ascent, which continues until close to

582 m. from Bombay, 54 m. from Marwar junction, **Beawar** station (D.B.), an important town, and the capital of the district of Merwara, a long narrow tract skirting the Aravalli Hills between the States of Mewar and Marwar, and forming part of the British administrative unit of Ajmer-Merwara (see below). There is a shrine here over the tomb of Col. C. G. Dixon, who was Superintendent of Beawar from 1836 to 1848, and commanded the Merwara Battalion, which he raised, until his death in June, 1857. On the shrine, which is an object of worship by the Mers (cp. Kipling's story, *The Tomb of his Ancestors*), there used to be a glass case containing a richly embroidered silk dress, which had come from Paris for the Colonel's Indian wife (see *The India We Served*, by Sir W. Lawrence, p. 38).

615 m. from Bombay **AJMER** junction station * (D.B.), lat. 26° 87', long. 74° 44'. There is no hotel or D.B., but limited accommodation is available at the stn. waiting-room. A line runs S. to *Nasirabad, Chitorgarh, Nimach, Rattam, Indore, Mhow, and Khandwa* (see Route 8).

Ajmer,¹ the key to Rajputana

¹ See *Ajmer*, by H. B. Sarda (Scottish Mission Industries Co., 1911).

(pop. 113,512), is the capital of an isolated British District in the Rajput States. The District comprises two tracts known as Ajmer and Merwara (population 495,271). The Agent of the Governor-General for Rajputana, whose summer headquarters are at Abu, is *ex-officio* Chief Commissioner of Ajmer-Merwara. The city is of great antiquity and celebrity, and is situated in a valley, or rather basin, at the foot of the rocky and picturesque Taragarh Hill (3000 ft. above the sea). It is surrounded by a stone wall with five gateways, and is well built, containing many fine houses of stone with ornamental façades. According to tradition, Ajmer was founded in 145 A.D. by Ajaipal, one of the Chauhan Kings.¹ It was sacked in 1024 by Mahmud of Ghazni, on his way to Somnath in Kathiawar, and again by Muhammad Ghori in 1193. After the invasion of Timur it was seized by Rana Kumbha of Mewar. The Muhammadan rulers of Malwa held it from 1470 to 1531, when it passed into the possession of Maldeo, the Rathor chief of Marwar. It was annexed in 1536 by Akbar, who was fully aware of its strategic importance and made it a royal residence.

Jahangir and Shah Jahan spent much time at Ajmer. An account of the city has been given by Sir Thomas Roe, the ambassador of James I., who was received in audience here by Jahangir² with "courtly condescension" on 16th January 1616, and went with him to Ujjain (p. 153) in the following year. While Roe was on his way to Ajmer, he was met by "the famous unwearied walker, Tho. Coryatt, who on foote had passed

¹ The date of Ajaipal is placed much later—about 1100 A.D.—by Dr Bühler. Ana, the son of Ajaipal, who built the Ana Sagar embankment, is shown by an inscription found at Chitor to have been living in 1150.

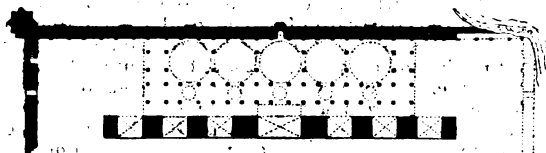
² A picture by Mr W. Rothenstein, commemorating the audience, forms one of the frescoes in St Stephen's Hall, Westminster.

most of Europe and Asya and was now in India, beeing but the beginning of his travells." Coryat had spent £2, 10s. on the journey from Jerusalem to Ajmer: he died at Surat in December 1617.¹

In about 1720 Ajit Singh Rathor of Marwar seized the city, which was recovered by Muhammad Shah, and made over by him in 1731 to Abhay Singh, the son of Ajit, as Viceroy on his behalf. In 1750 Abhai's son, Ram Singh, called in the Mahrattas, under Jai Appa Scindia, who was murdered, and in 1756 Ajmer was made over by them to Bijai Singh, cousin of Ram Singh. In 1787 the Rathors recovered Ajmer, but after their defeat at Merta in 1790 had to surrender it again to Scindia. On

pavilions on the embankment, which were for some years the only public offices in Ajmer, the chief one, in which the Emperor often reposed, being used as the official residence of the Commissioner. They have now all been restored by direction of Lord Curzon. The walk along the *bund*, or embankment (which is public), is very delightful. To the W. is the broad expanse of the lake, and to the E., under the *bund*, is the *Public Garden*. The city is supplied with water from the new lake, the *Foy Sagar*, formed by an embankment thrown across the valley 3 m. higher up.

Akbar's Palace is inside the city, near the E. wall. The entrance



The Arhai-din-ka-jhonpra Mosque at Ajmer.

the 25th of June 1818 Daulat Rao Scindia handed it over by treaty to the English.

Ajmer is the headquarters of about 1800 m. of metre-gauge railway, worked by the B.B. and C.I. Railway Company. Near the railway station are very extensive workshops employing many thousand Hindu and Muhammadan workmen.

The *Residency* is on the brink of the beautiful artificial lake called the *Ana Sagar*, constructed by Raja Ana in the middle of the 12th century, and lying N. of the city and railway station. It forms the source of the River Luni, which finally unites with the Delta of the Indus. The Emperor Shah Jahan erected a noble range of marble

gate is very fine. It was once an arsenal, and then used as a *tahsil* building. The central pavilion has been repaired, and is now used as the local museum.

The mosque, called the *Arhai-din-ka-jhonpra*, or "The Hut of two and a half Days," is just outside the S.W. city gate, beyond the *Dargah*. The name is derived from a tradition that it was built supernaturally in two and a half days. It seems to have originally been a Jain College, built in 1153. It was damaged by the Afghans in 1192, and turned into a mosque by building a massive screen or façade of seven arches in front of the many-pillared hall. This work was done by Kutb-ud-din in about 1200. The rows of slender pillars are probably *in situ*. Their ornamentation is very complex, no two

¹ See Sir William Foster's edition of *Roe's Journal* (p. 83; Oxford, 1926).

being alike. The mosque is sadly ruined, and only part of the screen of arches (200 ft. long), and part of the Jain hall behind them, now remain, the whole of the other three sides of the enclosure having disappeared. The work has recently been repaired and is under Government protection. The mosque was very much larger than that at the Kutb near Delhi (p. 315), the measurements of the exterior being 172 ft. by 264 ft., and of the interior quadrangle 200 ft. by 175 ft. The mosque proper measures 259 ft. by 57 ft., and has ten domes in the roof borne by 124 columns. The screen in front of it is a work well deserving attention; it is the glory of the mosque, and consists of seven arches very similar to those with which Altamsh adorned the courtyard of the Kutb. In the centre the screen rises to a height of 56 ft., and at the corners above this arch rise two short minarets with Tughra inscriptions. Nothing can exceed the taste with which the Kufic and Tughra inscriptions are interwoven with the more purely architectural decorations and the constructive lines of the design.

The bridle-path to *Taragarh* passes this mosque, and by a steep ascent reaches the summit in 2 m. The view from the top is very fine; but the ascent is somewhat trying, and had better be made in the early morning. There is also an interesting graveyard of Muhammadan martyrs, who fell in the assault of the fort on the top.

One of the principal points of interest in Ajmer is the *Dargah*,—a most picturesque place—in the S.W. corner of the city which was commenced by the Emperor Altamsh and completed by Humayun. It is venerated alike by Muhammadans and Hindus, and derives its extreme sanctity from being the burial-place of Khwaja

Muin-ad-din Chishti, who was called *Aftab-i-Mulk-i-Hind*, the Sun of the Realm of India. He died in 633 A.H. = 1235 A.D. He was the son of Khwaja 'Usman, and was called Chishti from a quarter in the city of Sanjar in Persia. Of this family of saints and courtiers, Farid-ud-din is buried at Pakpattan, in the Punjab; Nizam-ud-din, Kutb-ud-din, and Nasir-ud-din at or near Delhi; Shaik Salim at Fatehpur-Sikri near Agra; and Banda Nawaz at Gulbarga in the Deccan.

The memory of the Ajmer Chishti was held in particular respect by the great Akbar, who was accustomed to pay a yearly visit to his shrine. Several of these pilgrimages were made on foot from Agra and other places. The road from Fatehpur-Sikri to Ajmer was so much used by Akbar that he caused "*Kos Minars*" (masonry columns answering to our milestones) to be erected along the route. Several of these minars can still be seen from the railway.

Visitors are expected to remove their boots before entering the *Dargah*. Passing through a lofty gateway, a courtyard is entered, in which are two very large iron cauldrons. Rich pilgrims and other rich Muhammadans who have not visited Ajmer, pay for a feast of rice, ghi, sugar, almonds, raisins, and spices, to be cooked in one of these, the contents being ladled out and finally scrambled for by various families connected with the shrine, who live near the *Dargah* in a quarter known as *Inderkot*, and have a right to perform the ceremony called "*looting the deg*," which they do forcibly. On the right of the courtyard is a mosque built by Akbar, with drums and candlesticks taken from the army of the famous Daud Khan Sultan of Bengal, and presented to the mosque by Akbar; and farther on in the inner court is a white marble mosque, 100 ft. long, and with

eleven arches to the front, built by Shah Jahan; a Persian inscription runs along the whole front under the eaves. In the centre of the second court, and opposite the marble mosque, is the *Tomb* of the saint, a square building of white marble surmounted by a dome. It has two entrances, one of which is spanned by a silver arch. S. of it in a small enclosure with well-cut marble lattices, is the Mazar, or "grave" of Hafiz Jamal, daughter of the saint, and W. of it, close by her tomb, is that of Chimmi Begam, daughter of Shah Jahan. All these are considered too sacred to be approached by any one except Muhammadans. There are some very fine trees in the enclosure.

At the S. end of the Dargah enclosure is the Jhalra, a deep tank partly cut out of the rock, and lined by steep flights of irregular steps. As at Fatehpur Sikri, the doors of the shrine are covered with votive horse-shoes, nailed there by horse-dealers to commemorate successful deals.¹ Several doors in the precincts of the Dargah are plated with silver.

S.E. of the city is the Mayo College, for the education of young Rajput Princes, opened by Lord Northbrook in 1875. It contains about one hundred and fifty boys between the ages of eight and twenty-one years. The central building is a handsome white marble pile; in front of it is a statue of Lord Mayo. The subsidiary buildings have been erected by various States as hostels for the pupils from each State. The park round the buildings comprises 200 acres.

The sacred Lake of Pushkar lies about 7 m. W. of Ajmer.

The road skirts the W. shore of the Ana Sagar, and at 3 m. passes the village of Nausar, in a gap in

the hills which divide the Ana Sagar from the Pushkar valleys. This striking pass through the hills is 1 m. long. Pushkar, the most sacred lake in India, lies in a narrow valley overshadowed by fine rocky hills, and is said to be of miraculous origin. Already in the 4th century it was one of the most frequented objects of pilgrimage, and is still visited during the great *mela* (fair) of October and November by about 100,000 pilgrims. On this occasion is also held a great mart for horses, camels, and bullocks.

Although the ancient temples were destroyed by Aurangzeb, the five modern buildings, with their ghats on the margin of the lake, are highly picturesque. The temple to Brahma, at the further end of the lake (which visitors may not enter) is regarded as a peculiarly holy shrine, from the fact that it marks the spot where the incarnation of Brahma took place. It is usually said to be the only one in India; but there are smaller shrines to Brahma at several old temples. Over the gateway is the figure of the *hans*, or "goose," of Brahma. The sacred crocodiles in the lake will be fed by the Mahants on request, when a small gratuity of one or two rupees will be appropriate. The D.B. is in an Indian house on the lake, from which there is a good view.

658 m. from Bombay is Naraina station. The village, with a large tank, is seen from the railway. It is the headquarters of the Dadupanthi sect of reformers. Their religion, ethics, and teaching are embodied in a mass of poetry written by one Dadu and his disciples. A division of the sect is composed of military monks, who serve in the armies of the Jaipur and neighbouring States.

664 m. from Bombay is Phalera junction.

¹ This is still done occasionally.

A direct chord line (metre-gauge), 134 m. long, runs from Phalera to Reengus and Rewari (p. 231); while to the W. a branch runs to Kuchaman Road (p. 219) and thence by the Jodhpur Ry. to Degana, Merta Rd. (for Bikaner), Jodhpur and Marwar junction.

* 699 m. from Bombay is **JAIPUR station** * (population 120,207), much frequented by tourists, and furnished with three good hotels. Passes to view the palace at *Jaipur*, and also the old palace at *Amber*, must be obtained from the Resident at Jaipur 24 hours beforehand. (The landlords at the hotels obtain the passes.) Motors for *Amber*, etc., are available. *Amber* is the ancient capital and was founded in 928 A.D. Jaipur is the residence of the Maharaja and the headquarters of the Resident. The present Chief, who is head of the Kachhwaha clan of Rajputs, is H.H. Maharajadhiraja Sawai Man Singh Bahadur (born in 1911, succeeded in 1922). His two immediate predecessors were notable figures in the history of modern Rajputana. Maharaja Sir Ram Singh succeeded Maharaja Jai Singh III. in 1835 and reigned until 1880. During the Mutiny he placed the whole of the resources of the State at the disposal of the British Raj. Maharaja Sir Madho Singh II. (1880-1922) came to London for the Coronation of King Edward VII. in 1902. The State covers an area of nearly 15,600 sq. m., with a pop. of 2,338,000 and an annual revenue of 120 lakhs. In the first year of Akbar's reign Raja Bhar Mal (who d. in 1574) was presented at his court and gave him his daughter Mariam-zamani in marriage; she was the mother of Jahangir. Bhar Mal's grandson was the celebrated Raja Man Singh (d. 1615) whose name and fame are so closely associated with Akbar. Jaipur derives its name from the famous Maharaja.

Sawai¹ Jai Singh II. (1699-1744), who founded it in 1728. This Chief stood by the son of Prince Azam Shah in the struggle for the Empire on the death of Aurangzeb, and drove the Mughals out of Jaipur; he died in 1744 after a very long reign. The first treaty with the British was concluded in 1818 by Maharaja Jagat Singh, who died in that year.

The town is surrounded on the N. and E. by rugged hills, crowned with forts. That at the end of the ridge overhanging the city on the N.W. is the Nahargarh, or "Tiger fort." The face of the ridge is scarped and inaccessible on the S. or city side, while on the N. it slopes towards *Amber*.

A crenellated wall, with seven gateways, encloses the whole city, which is the pleasant healthy capital of one of the most prosperous independent States of Rajputana,² and is a very busy and important commercial town, with large banks and other trading establishments. It is a centre of native manufactures, especially those of many kinds of jewellery and of coloured printed cloths and muslins. The enamel-work done here is the best in India; and the cutting and setting of garnets and other stones found in the State is an important industry. The crowded streets and bazars are most lively and picturesque. The city is remarkable for the width and regularity of its main streets. It is laid out in rectangular blocks, and is divided by cross streets into six equal portions. The main streets are 111 ft. wide, and are paved, and the city is lighted by electric light.

The Maharaja's Palace, with its beautiful gardens and pleasure-grounds, $\frac{1}{2}$ m. long, adorned with fountains, fine trees, and flowering

¹ Sawai means 14, and was a complimentary title given to Jai Singh by Aurangzeb.

² See *Letters of Marque*, by Rudyard Kipling.

shrubs, occupies the centre of the city and covers one-seventh of its area. The whole is surrounded by a high embattled wall, built by Jai Singh, but many of the buildings included in it are of a later date. The Chandra Mahal, which forms the centre of the great palace, is a lofty and striking building, seven storeys high, looking over the gardens. On the top storey there is a magnificent view over the Centre city. To the left are the gaudily-furnished modern buildings containing the apartments of the Maharaja and his courtiers and the zenana. Close by, to the right, on the ground floor, is the Diwan-i-Khas, or private hall of audience, built partly of white marble, and remarkable even in India, for its noble simplicity.

E. of the Chandra Mahal is the famous Jantra (Yantra), or Observatory, the largest of the five built by the celebrated royal astronomer, Jai Singh; the others are at Benares, Muttra, Delhi and Ujjain. It is not under cover, but is an open courtyard full of curious and fantastic instruments invented and designed by him. It was constructed between 1718-34 A.D., and was recently restored by the late Maharaja of Jaipur through the agency of Lieutenant A. Garrett, R.E., and Pandit Chandradhar Guleri, who have published a most interesting monograph upon it. The principal instruments are; first on the W., the two circular Ram Yantras for reading altitudes and azimuths, with twelve horizontal sectors of stone radiating from a round vertical rod; then E. of these, the twelve Rashivalayas for determining celestial latitudes and longitudes; and next, the great Samrat Yantra, or gnomon, 90 ft. high, situated between two graduated quadrants, with sextants in a chamber outside them. The gnomon's shadow thrown by the sun touches the W.

quadrant at 6 A.M., gradually descends this at the rate of 13 ft. per hour till noon, and finally ascends the E. quadrant. To the N. of this is a Dakhshina Bhatti Yantra, or meridional wall, near which is a large raised platform known as Jai Singh's seat, and near it are two brass circles, one of which is a map of the celestial sphere. Between these and the Ram Yantras are a number of other instruments, known as the Kranti Yantra, the Kapali, and the Chakra Yantra, the last being a graduated brass circle corresponding to the modern equatorial.

S.W. of the Observatory, and adjoining the Tripolia Gate, are the royal Stables, built round large courtyards; and beyond them, towards the E., is the Hawa Mahal, or Hall of the Winds, built by Maharaja Madho Singh I. (d. 1768), a fantastic and elaborate building, decorated with stucco, and overlooking one of the chief streets of the town.

In the central court of the palace are the Clock Tower and the Armoury. To the E. of the Diwan-i-'Am is the Parade Ground, girt with open colonnades, behind which are the Law Courts.

Near the Tripolia Gate rises the Iswari Minar Swarga Sul, the "Minaret piercing heaven," built by Raja Iswari Singh (d. 1751) to overlook the city.

The Public Garden, outside the city wall to the S., is one of the finest in India, 36 acres in extent, and was laid out by Dr de Fabeck at a cost of about Rs.400,000.

Attached to it are a fine menagerie and aviary. These gardens cost the Maharaja Rs.16,000 a year to keep up. There is a fine statue of Lord Mayo in them, and in the centre is the Albert Hall—a sumptuous modern building, designed and built by the late Sir Swinton Jacob, K.C.I.E., of which the

Prince of Wales (King Edward VII.) laid the first stone in 1876. It contains a large Darbar Hall and a beautiful museum—an Oriental South Kensington—suitably housed. The collections of modern works of art and industry, and also of antiquities, from every part of India are very complete and highly interesting. There is a fine view from the top.

The **Mayo Hospital**, beyond the gardens, is of rough white stone, with a clock tower. It can house 150 patients.

The foundation-stone of the **Lansdowne Hospital for Imperial Service Transport Corps** was laid by the Viceroy of that name in 1890. It was opened in the year 1891; and the total cost was Rs.29,085. It affords accommodation in two wards for thirty in-patients, and has a large out-patient room, a dispensary, an office, and excellent quarters for the staff.

The **Jaipur State Transport Corps** was raised in 1889 as the contribution of the Jaipur State towards the scheme of Imperial defence, with 1000 ponies, 500 men, and 400 carts. Its permanent strength is now 1200 ponies, 712 combatants, 16 tongas and 570 carts, divided into 11 troops. The Commandant has under him 1 Assistant-Commandant and 11 troop officers.

The Corps saw service in Chitral, 1895-6, in the Tirah, 1897-8, in Mesopotamia, 1914-18, and in the Afghan War of 1919. It also took part in the Delhi Darbar Manœuvres, 1902-3; in the Agra Darbar, 1905, held in connection with the visit of H.M. the Amir of Kabul; and again in the Delhi Coronation Darbar, 1911. The services rendered were in each case warmly appreciated and acknowledged. In the great famines of 1899-1900 and 1906, the Com-

mandant and his men rendered very valuable assistance in the relief operations.

The ambulance section of the Corps is maintained in accordance with the regulations of the St John Ambulance Association.¹ This section is capable of carrying at once 700 sick or wounded, and the other carts of the Corps are so made as to be fitted up as ambulances should an emergency arise for the removal of a far larger number of sick or wounded men.

The organisation of the Corps has been admitted on all hands to be admirable, and its efficiency is evident from its record. The annual upkeep charges amount to upwards of 6½ lakhs.

The Corps is primarily meant for the Imperial defence, and in peace-time it is employed all over the capital on numerous useful duties. A recent achievement is the laying out and construction of a road, since called the "Queen's Road," from the waterworks, Kacha Band, to Khatipura, and again from the Khatipura Road to the Ajmer Road, a distance of over 5 m. The road may be called a model one as regards its plan and lay-out, and a drive along it will well repay the trouble.

The lines lie at the back of the Palace to the N. of the city.

The **Transport Gardens**, now commonly called the Naya Ghat, were laid out by Rai Bahadur Major Dhanpat Rai Sardar Bahadur, C.I.E., the Commandant of the Corps in 1896, in the bed of the Amnisha Nulla, adjoining the Transport lines, and are more than 2 m. in length. The nulla was a reed-grown pestilential swamp before its reclamation was taken in hand, and the Commandant converted the bed into beautiful gardens, partly with the aid of his

¹ Jaipur is a centre of the Association. H.H. the Maharaja is the President, and the Secretary to the State Council acts as Secretary.

own men and partly by employing famine labour. In place of a dense growth of reeds and stagnant pools—the haunt of wild animals and robbers—there now stand extensive gardens, beautifully planned and laid out, along the centre of which flows a fine stream fed by leakage from the waterworks reservoir, winding its course through well-designed artificial lakes made for irrigating the side-gardens. It serves as a pleasure-resort for peoples of all nationalities; here Europeans and Indians hold their picnics and outings, for which ample accommodation has been provided in the gardens. In the month of Savan (August) each year a fair is held, and as many as 20,000 people assemble to enjoy the coolness of the rainy season. It is the most agreeable place in Jaipur. The gardens grow all sorts of fruits and fodder.

The **Church** is near the hotels and on the way to the railway station, a little to the W. of the road. There is also a R.C. church at Ghat Darwaza.

At the **School of Art**, a handsome modern building, are first-rate technical and industrial classes for teaching and reviving various branches of local artistic industry—such as metal and enamel-work, embroidery, weaving, etc.

The **Maharaja's College**.—In Jaipur public instruction has made greater progress than in the other States of Rajputana. The College, founded in 1844 and maintained entirely by the Darbar, is situated in the city, and is a free institution, no fees of any kind being charged to the pupils. It has a daily class attendance of about 1000 students, both in the college and school departments. It is a first-grade college, being affiliated to the University of Allahabad, up to the M.A. standard in Arts and B.Sc. standard in Science.

The Maharaja's Public Library.

This was founded by Maharaja Sir Ram Singh in 1866 for the educated public. It contains English, Sanskrit, Hindi, Persian, Arabic, Urdu, and other books, totalling in all about 19,000 volumes. It is open to the public from 6.30-7.30 A.M. to 9.30-10.30 A.M., and from 2.30-3.30 to 5.30-6.30 P.M. Books are issued to the readers on payment of a subscription from Rs.1 to Rs.6, and a deposit of Rs.10. The College students and professors are allowed a free use of books at the recommendation of the Principal of the Maharaja's College. A committee manages the Library and selects new books to be purchased. It is under the direct control of the State Council, with a librarian in charge.

The *Chhatris*, or *cenotaphs of the Maharajas*, at Gethur are just outside the N.E. city wall. They are in well-planted gardens, the trees of which are full of solemn-looking grey-headed monkeys. The first seen on entering is the Chhattri of Maharaja Jai Singh II.—the finest of all. It is a dome of the purest white marble, supported on twenty beautifully carved pillars rising from a substantial square platform, and profusely ornamented with scenes from Hindu mythology. S.E. of Jai Singh's Chhattri is that of his son Madho Singh, a dome rising from the octagon on arches reversed. The only ornaments are carved peacocks. W. of this Chhattri is that of Pertab Singh, his son (d. 1803), completed by the late Maharaja Sir Ram Singh. It is of white marble brought from Alwar.

The water which supplies Jaipur is drawn from a stream on the W. of the city, running into the Banas. The pumping-station and high-level reservoirs are about 2 m. W. outside the Chandpol Gate.

An expedition for the sake of the view may be made by elephant or on foot a short distance from the E. or Surya Gate, to the *Shrine of the Sun God at Galla*—an unin

teresting building 350 ft. above the plain, and built on a jutting rocky platform on the summit of a range of hills about $1\frac{1}{2}$ m. to the E. of Jaipur, of which by far the finest view is obtained from this point. The encroachment of the sandy desert on the town has caused one large suburb to be deserted, and other houses and gardens are going to ruin.

Behind the temple is a deep gorge filled with temples and sacred tanks shadowed by rugged crags; a paved causeway leads through the ravine which is well worth visiting.

There is also a pleasant drive to a similar gorge along the *Agra Road*, 2 m. E., which is lined with pleasure palaces, gardens, and temples.

The excursion to **Ambèr**¹ (5 m. from the city gate and 7 m. from the hotels), founded in the 11th century, and the capital of Jaipur till 1728, now ruined and deserted, is most interesting, and will occupy a whole morning. It was the custom to use an elephant for the last 2 m. of the excursion, but a new, well-engineered road has been constructed, extending all the way to Ambèr, and the journey is now made by motor-car.

On the left of the road a line of fortified hills is passed; these culminate in the great *Fort*, 400 ft. above the old palace, connected with it and built for its defence. The picturesque situation of Ambèr at the mouth of a rocky mountain gorge, in which nestles a pretty lake, has attracted the admiration of all travellers, including Jacquemont and Heber. It was founded by the Minas, and was flourishing in 967. In 1037 it was taken by the Rajputs, who held it till it was deserted, in favour of Jaipur.

The **Old Palace** at Ambèr, begun by Man Singh (1600),² ranks

architecturally second only to Gwalior, though instead of standing on a rocky pedestal it lies low on the slope of the hill, picturesquely rooted on its rocky base and reflected in the lake below. The interior arrangements are excellent. The suites of rooms form vistas opening upon striking views. It is a grand pile, and though it lacks the fresh and vigorous stamp of Hindu originality which characterises earlier buildings, the ornamentation and technical details are free from feebleness.

Entered by a fine staircase from a great courtyard is the *Diwan-i-'Am*—a noble specimen of Rajput art, with a double row of columns supporting a massive entablature, above which are latticed galleries. Its magnificence attracted the envy of Jahangir, and the Mirza Raja,¹ to save his great work from destruction, covered it with stucco.

To the right of the *Diwan-i-'Am* steps is a small temple, where a goat offered each morning to Kali preserves the tradition of a daily human sacrifice in prehistoric times.

On a higher terrace are the Raja's own apartments, entered by a splendid gateway covered with mosaics and sculptures, erected by Jai Singh, over which is the *Sohag Mandir*—a small pavilion with beautiful latticed windows. Through this are further marvels—a green and cool garden with fountains, surrounded by palaces, brilliant with mosaics and marbles. That on the left is the *Jai Mandir*, or Hall of Victory, adorned by panels of alabaster, some of which are inlaid, and others are adorned with flowers in alto-relievo, "the roof glittering with the mirrored and spangled work for which Jaipur is renowned." Near the *Jai Mandir* a narrow passage leads down to the

¹ Locally pronounced *Am-air*.

² Man Singh was the nephew of Raja Bhagwan Das, the friend of Akbar.

¹ Raja Jai Singh I. (d. 1662) was known by this title.

bathing-rooms, all of pale creamy marble. Above is the *Jas Mandir*, "which literally glows with bright and tender colours and exquisite inlaid work, and looks through arches of carved alabaster and clusters of slender columns upon the sleeping lake and the silent mountains."

At the N.E. angle is a balcony, whence there is a fine view over the town of Ambār and the plain beyond to the hill which overlooks Ramgarh. Some *Chhatris* outside the wall are those of Chieftains who died before Jai Singh II. In the palace to the right is a chamber, on the right wall of which are views of Ujjain, and on the left views of Benares and Muttra. That opposite the Jai Mandir is called the *Sukh Niwas*, "Hall of Pleasure." In the centre of the narrow, dark room is an opening for a stream to flow down into the groove or channel which runs through the hall. The doors are of sandalwood inlaid with ivory.

A steep path leads down to the Khizri Gate, beyond which, as it leads to one of the forts, Kantagarh, no one is allowed to pass without an order. At the bottom of this path there is a temple to Thakurji, or Vishnu. It is white and beautifully carved, and just outside the door is a lovely square pavilion exquisitely carved with figures representing Krishna sporting with the Gopi milkmaids.

Ambār formerly contained many fine temples, but most are now in ruins.

Sanganer, about 8 m. to the S. of Jaipur, also deserves a visit, and may be reached by a pleasant drive past the Residency and the Moti Dongari, or by the railway from Jaipur to Siwai Madhupur (see below).

The road into the town is through two ruined Tripolias, or triple gateways of three storeys, about 66 ft. high. The second

storey has an open stone veranda, supported by four pillars on either side of the archway. On the right ascending the street is a small temple sacred to *Kalyanji*, or *Krishna*, the door of which is handsomely carved. Opposite is a temple to Sitaram, with a pillar, 6 ft. high, of white Makrana marble, called a Kirtti Khambh. On the four sides are Brahma, with four faces; Vishnu, cross-legged, holding the lotus; Siva, holding a cobra in his right hand and a trident in his left, with Parvati beside him, and Ganesh.

Higher up, on the left, are the ruins of the *Old Palace*, which must once have been a vast building. N. by E. from this is the *Sanganer Jain Temple*, with three courts, and finely-carved marble work. Visitors are not allowed to enter the third.

The Jaipur State Railway (metre-gauge) runs from Siwai Madhupur where it connects with the B.B. and C.I. Ry. broad-gauge line (p. 253), 83 m., Jaipur, and then continues N. through Reengus (jn. with the Phalera-Rewari line) to Sikar, 147 m., and 187 m., Jhunjhunu, in Jaipur territory (no express trains).

755 m. from Bombay is Bandikui junction station (R.). Here are railway workshops, church institute, and a considerable station for railway employes. The line for *Bharatpur junction*, *Achnera junction*, and *Agra* branches off E. (see Route 12).

792 m. from Bombay, **ALWAR** is the capital of the State of that name, founded in 1771 by Rao Pratap Singhji of Macheri, who threw off his allegiance to Jaipur. It has an area of 3185 sq. m., a pop. of 701,154, and a revenue of about 55 lakhs. The capital (pop. 47,760) is beautifully situated on rising ground, dominated by

the Fort, which crowns a conical rock and is backed by a range of mountains. The present ruling Prince, Col. His Highness Maharaja Sawai Sir Jey Singh Bahadur, G.C.S.I., G.C.I.E. (b. 1882, succ. 1892) is by race a Naruka Rajput of the Kachhwaha clan. He is descended from the Suryabansh (the Solar dynasty), and belongs to the ancient royal family of Ambèr (Jaipur). The title of Maharaja was conferred in 1889 upon His Highness's predecessor, Maharao Raja Sir Mangal Singh, G.C.S.I.

The Dak Bungalow is about 100 yds. from the railway station. Carriages from the State Stables are available on hire by application to the "Munsarim Buggikhana."

Palaces.—The Moti Doongri Palace, built on a hill, 1 m. to the S. of the railway station, is the residence of the present Maharaja. It is surrounded on all sides by fine gardens and beautiful lawns. There are other palaces in the capital, one of them being the Vinai Vilas Palace, named after the late Maharao Raja Vinai Singhji (1815-57), and now used for His Highness's Government Offices. The city palace is at the very end of the city and consists of a group of buildings partly detached, and built in a variety of styles, separated from the base of the mountain by a very picturesque tank. The handsome Shish-Mahal (Glass-room) overlooks the tank. This palace contains a valuable *Library*, kept in excellent order, and rich in Oriental manuscripts. Eminent Sanskrit and Persian scholars from Western countries visit this library for taking copies of ancient manuscripts. One of the principal ornaments in the collection of this library is a matchless *Gulistan*, which cost about £10,000 to produce; it is beautifully illustrated with miniature paintings. It was finished in 1848 by the order of Maharao Raja Vinai Singhji. Another beautiful book is the *Dah Pand*, written in 1864.

The *Armoury* contains a splendid collection of sabres and other weapons finely wrought and finished and studded with jewels; also of handsome swords with hilts of gold. Dozens of these swords are from Persia, while many of them were made at Alwar, in imitation of the Ispahan steel. The arms of Maharao Raja Vinai Singhji could only be worn by a man of great stature. Permission to visit these palaces must be obtained from His Highness's Minister in charge.

The *Sagar* (tank), with the buildings that surround it and the fort in the background, forms one of the most picturesque spots in India. To the E. are the palace buildings, on the W. are a number of temples and shrines shrouded by trees; and raised upon the centre of a platform on the S. is the cenotaph of the late Maharao Raja Bakhtawar Singhji (1781-1815). The plinth is made of red sandstone and the cenotaph itself of beautiful marble. Visitors who desire to enter this building must take off their shoes. Hundreds of pigeons fly about these sacred precincts, and numbers of stately peacocks strut unmolested about the stone pavements.

The *State Stables* are well worth a visit. In the city, just right of the main palace-entrance, is the house of the Elephant carriage. It was built by Maharao Raja Vinai Singhji, and is used by the present ruling Prince on the Dussera Festival. It is a car two storeys high, and can carry fifty persons. It is usually drawn by four elephants.

The *Feelkhana* (Elephant Dept.) is another interesting institution. There are altogether thirty elephants, skilfully trained for purposes of big-game shooting.

The *Purjan Vihar* (Garden).—This is a beautiful public park on the outskirts of the town. In the centre of this park is a fine summer-house, with picturesque fountains

and beautiful ferns. There is also a small menagerie in this park, consisting of lions, tigers, panthers, and bears.

There is little to see at the *Fort*, but the view from this great height of the city below and the surrounding country interspersed with lakes, is magnificent. The ascent is steep, and is paved with slippery and rugged stones. At a point about 150 ft. up, the steepest part of the ascent begins. It is called *Hathi Mora*, "the Elephant's turn," because hitherto these animals could not go beyond this point; a motor road has now been made right up to the top of the hill. Behind the fort, at a distance of 1 m., is the *Chhatra* of the late Maharao Raja Pertab Singhji (d. 1791), the Founder of the State, and, alongside it, is a small monument of his Queen Consort who became *sati*.

The tomb of Fateh Jang, a Minister of Shah Jahan, near the station, on the Bharatpur road, is a conspicuous object with an immense dome, and bears the date, in Nagri, 1547; the outside is poor in design compared with the interior. The building possesses a considerable amount of fine plaster-work in relief, with flat surface patterns and rectangular mouldings.

1 m. N. of the city is the *Jail*, and 2 m. to the S. is the Artillery Ground and Top Khana, "Artillery Arsenal."

The State troops consist of two batts. of infantry and three squadrons of cavalry, besides a body-guard 100 strong. The former infantry regiment took part in the China Expedition in 1900-1, and carries the reputation of being one of the best drilled regiments in India. After 1914 both the present regiments were engaged on active service in France, Egypt, and the N.W. Frontier of India.

Alwar and its outskirts are supplied with water from Siliserh lake, 6 m. S.W. of the city. A

masonry dam, about $\frac{1}{2}$ m. long, and 4 m. from the Moti Doongri hill, has been constructed, at a cost of Rs. 8 lakhs to impound water from the Ruparel river. The water stored by this masonry dam, amounting to some 1100 millions of c. ft., forms a splendid reservoir, covering an area over 4 sq. m. It is known by the name of "Jey Samand Lake," named after the present reigning Prince, and is ornamented with beautiful *Chhatris* (domes).

There is plenty of small game, including panthers, in the neighbourhood of Alwar, while the State Forests abound in tigers: but they are reserved as Royal game. Shooting licences can be obtained on application to the Army Minister.

20 m. E. of Alwar, and adjoining the Mewati hills, is the battlefield of Laswari, where Lord Lake annihilated the Deccan battalions of Daulat Rao Scindia's European trained army on 1st November 1803, the British losses being 172 killed and 652 wounded, and the Maharratta losses 5000 to 7000. Later events have unduly obscured the achievements of this great British leader, who within a space of two months, and with a force never exceeding 8000 men, crushed 31 battalions of Scindia's troops in four pitched battles, captured 426 guns, took two fortresses (Aligarh and Agra), and entered the capital of India (Delhi) as a conqueror.

798 m. from Bombay and 52 m. from Delhi is **Rewari** junction station (R., D.B. and Hindu-Muhammadan Hotel). Rewari was founded in 1000 A.D. by Raja Rawat. There are the ruins of a still older town E. of the modern walls. The Rajas of Rewari were partially independent, even under the Mughals. Near the town they built the mud fort of Gokalgarh, which is now in ruins, but was once

very strong. They coined their own money, and their currency was called Gokal Sikka. Rewari is a place of considerable trade, particularly in iron and brass. The Town Hall is handsome, as are the Jain Temples and Tej Singh's Tank, close to the town.

From Rewari a B.B. and C.I. narrow-gauge line, 187 m., runs N.W. to Hissar and Bhatinda Jn., where connection can be made with the N.W. Ry. broad-gauge mail route from Delhi to Ferozepore and Lahore (Route 15, p. 352).

On the chord line, 134 m. from Rewari to Phalera (p. 223),

30 m. S.W. of Rewari lies **Naraul**, the principal town of the possessions of the Patiala State in this quarter, made over to the State for loyal services rendered in 1857.

27 m. further on is **Reengus**, junction for the metre-gauge line, of the Jaipur State Ry. (p. 229).

On the main line, 32 m. from Rewari, is

830 m. from Bombay, **Gurgaon**, the headquarters of the South-Easternmost District of the Punjab. Two metalled roads E. to Delhi; one road 15 m. S. to Sohna, thence bifurcating S.E. to Palwal (p. 265) and S. to Alwar. Sohna is especially remarkable for its hot spring, situated in the town and close to the hills, which form a sort of perpendicular wall, crowned with the walls and bastions of an unfinished fort. The water of this spring is strongly impregnated with sulphurous acid, which, however, evaporates very rapidly. The spring is covered with a domed building and surrounded by small open bathing tanks. The water is considered of great value for purposes of rheumatism, gout, and skin diseases.

■ 849 m. from Bombay is **DELHI** Main station * (Route 14).

ROUTE II.

From AHMADABAD through KATHIAWAR by Viramgam, Kharaghoda, Wadhwan, Palitana (for Satrunjaya Hill), Bhaunagar, Junagadh, Girnar, Somnath, Porbandar, Rajkot, Jamnagar and Dwarka, and back to Ahmadabad.

The peninsula of **Kathiawar** is believed to have been an island in remote times. It has an approximate area of 20,332 sq. m. of which 1298 sq. m. are assigned to the British district of Ahmadabad, about 1245 sq. m. form part of the State of Baroda, and 20 sq. m. constitute the island of Diu, a Portuguese possession on the S. The remaining area is apportioned among 189 States of which seventeen are "Salute" States and the rest range in extent from considerable tracts of country, with chiefs enjoying great executive freedom, to clusters of villages which are States only in name. The capital of most of the principal States will repay a visit.

The largest State is **Cutch**, which has an area of 7616 sq. m., exclusive of the Runn of Cutch (see below) which covers about 9000 sq. m.; the pop. is 484,547 and the annual revenue is about 23 lakhs. The Maharao, H.H. Sir Khengarji Sawai Bahadur, G.C.S.I. G.C.I.E., who is a Jareja Rajput and claims descent from Sri Krishna, was born in 1866 and succeeded in 1876. He received full powers in 1885, and attended the Imperial Conference in London and the League Assembly at Geneva in 1921 as a representative of India. The state consists of a belt of land cut off from the mainland by the Runn on the N. and E., the Gulf of Cutch on the S., and the Arabian Sea on the W.; and is difficult of access. Steamers run

about twice a week from Bombay to Mandvi, the chief port (on the S.) from which there is a macadamized road to Bhuj, the principal town, in the centre of the State, noted for the work of its silversmiths. There is a narrow gauge ry. (37 m.) from Bhuj to Tuna, which faces the mainland of Kathiawar.

Cutch and the Kathiawar States are placed under the political control of the Agent to the Governor-General for the Western States, who resides at Rajkot (p. 250); and there are Political Agents for E. and W. Kathiawar, with hdqrs. at Wadhwan (p. 234) and Rajkot.

Everywhere in Kathiawar there are long lines of *paliās*, or memorial stones, peculiar to this Province, on which men are usually represented as riding on a very large horse, whilst women have a wheel below them to indicate that they used a carriage. A woman's arm and hand indicate here, as elsewhere in India, a monument to a *sati* lady.

There is much game in Kathiawar, and specially in the Gir, the large wild tract, with its 1500 sq. m. of forest to the S.E. of Junagadh; but the Gir is very unhealthy in the early autumn, and again at the beginning of the rains. There are no tigers in the peninsula, but up to the middle of the nineteenth century lions inhabited all the large jungles, and were shot in the Choteyla Hills E. of Rajkot. The few animals left are now confined to the Gir, and are strictly protected. The Gir lion is in no way inferior to the African species, although the mane is not so large and is sometimes absent.

The Kathiawar Mail leaves Bombay (Colaba) daily, and proceeds on the broad-gauge to

Ahmadabad (p. 200), 310 m. from Bombay. The Sabarmati River is crossed on a fine bridge, with a footway for passengers alongside, and carrying the rails

for both broad- and narrow-gauges. From 4 m., Sabarmati (junction station), on the N. bank of the river, the narrow-gauge continues N. to Delhi and Agra. The broad-gauge turns W., and passing through a well-cultivated country, reaches

350 m. Viramgam junction station, *—a walled town (pop. 26,556). The Mansar Tank dates from the end of the 11th century. It is shaped like a shell, and surrounded by flights of stone steps; round the tops of the steps runs a row of small temples, in the sides of which there are holes, through which it is said a rope used to pass, enabling a worshipper to ring the bells in all the temples at once. The neighbourhood abounds in black buck, sand-grouse, and all manner of water-fowl.

From Viramgam a branch line runs N.W., passing at 18 m. Patri (D.B.), a small walled town with a citadel; and, at 23 m. reaches Kharaghoda, where there are very extensive salt-pans on the edge of the Little Runn of Cutch.¹

In the dry season the Runn presents the appearance of a hard, smooth bed of dried mud, and may be ridden over at any place. There is absolutely no vegetation except on some small islands which rise above the level of the salt inundation; the only living creatures that inhabit it are herds of wild asses, which feed on the lands near its shores at night, and retreat far into the desert in the daytime. With the commencement of the S.W. monsoon in May the salt water of the Gulf of Cutch invades the Runn, and later in the season the rivers from Rajputana pour fresh water into it. The sea is now encroaching rapidly on the Runn at its junction with the Gulf of Cutch, and

¹ The Great Runn lies N. of the State of Cutch and separates it from Sind.

there is reason to suppose that serious changes of level are taking place. The centre of the Runn is slightly higher than the borders, and dries first. The railway has many sidings extending into the Runn, to facilitate the collection of the salt, which is stacked at the station in very large quantities under the custody of the Salt Customs Department. Originally it was considered necessary to erect expensive roofs over the salt stacks, but experience has shown that this can be dispensed with. The salt is evaporated by the heat of the sun from brine brought up in buckets from depths of 15 ft. to 30 ft. Wonderful mirages are seen in the Runn, and in the winter season the flights of flamingoes and other birds are extraordinarily large. There are sand-grouse to be had round about.

The Kathiawar Mail proceeds from Viramgam by metre-gauge to

80 m. from Ahmadabad and 390 m. from Bombay, **Wadhwan** junction station (D.B.). To the N. runs the *Dhrangadhra State Railway*, and to the S. the *Bhaunagar State Railway*. The last-named line connects at Dhola jn. (see p. 235) with the *Gondal-Porbandar Railway*, which opens up a large tract of country in S. Kathiawar. To the W. the *Morvi Railway* runs to *Rajkot*; thence the *Jamnagar State Railway* runs to *Jamnagar* and *Dwarka* (p. 251), which is the terminus of the Kathiawar mail route, and the *Jetalsar Rajkot Railway* to *Jetalsar*, where it crosses the *Gondal-Porbandar* line. The *Junagadh Railway* runs from *Jetalsar* to *Veraval* via *Junagadh*, and from *Junagadh* to *Visavadar*. All the railways in Kathiawar are on the metre-gauge and managed by States or combinations of States.

The *Civil Station of Wadhwan*, in which the railway station is built, is land rented by the Government of India in perpetuity from

the Thakore Sahib of Wadhwan for the location of the establishments necessary for the administration of the E. portion of Kathiawar. A small town has sprung up close to the railway station. The Civil Station is 3 miles W. of Wadhwan city, connected by a tramway and by the *Bhaunagar Railway*.

At the *Talukdari School* the sons of *Girassias*, or land-owners, are educated when their parents are unable to afford the heavy cost of sending them to the *Rajkumar*, or *Princes', College*, at *Rajkot*. In many cases elder brothers are placed at the *Rajkumar College* and the younger at the *Talukdari School*.

Dhrangadhra, on the *Dhrangadhra State Railway* running from Wadhwan to Halwad, is the capital of the Dhrangadhra State, which covers an area of 1167 sq. m., with a pop. of 84,406 and an annual revenue of 25 lakhs. The ruler, H.H. Maharaja Sir Ghan-shyamsinhji Ajitsinhji, G.C.I.E., K.C.S.I., who was born in 1882 and succeeded in 1911, is the head of the clan of Jhala Rajputs. Since his accession the State has made great progress in all directions. The Khuda Ry., 14 m., was opened in 1923, for developing the State salt works.

Proceeding S. from Wadhwan jn. by the *Bhaunagar State Railway*, the river is crossed close to the station.

83 m. from Ahmadabad **Wadhwan City** station (R., D.B.). The town wall is of stone and in good order. Towards the centre, on the N. wall, is the ancient temple of **Ranik Devi**. She was a beautiful girl, born in the Junagadh territory when Sidh Raja was reigning at Patan, and was betrothed to him. But Ra Khengar, who then ruled Junagadh, carried her off and married her, which caused a deadly feud between him and Sidh Raja, whose troops marched to

Junagadh. Khengar was betrayed by two of his kinsmen, and was slain by Sidh Raja and his fortress taken. The conqueror wanted to marry Ranik Devi, but she performed *sati*, and Sidh Raja raised this temple to her memory. It bears marks of extreme old age, the stone being much worn; all but the tower is gone. Inside is a stone with the effigy in relief of Ranik Devi, and a smaller one with a representation of Ambaji. N. of this temple, and close to the city wall, is a *sati* stone dated 1519. Near the Lakhupol Gate is a well with steps, ascribed to one Madhava, who lived in 1294 A.D.

The *Palace* in the centre of the town has four storeys, and is 72 ft. high. It stands in a court facing the entrance, on the right of which is a building called the *Mandwa*, where assemblies take place at marriages. There is also a Palace called the *Balchandra Vilas*, built by the late Thakore Sahib Bal-sinhji. The present Thakore Sahib, Shri Jorawarsinhji Jaswantsinhji, who is a Jhala Rajput, was born in 1899 and succeeded in 1918. His State covers an area of 243 sq. m. with a pop. of 37,946 and an annual revenue of 7 lakhs.

96 m. **Limbdi station**—chief town of the cotton-producing Limbdi State: a well-cared-for place, with a very handsome Palace. The Thakore Sahib, Sir Daulatsinhji Jaswantsinhji, K.C.I.E., who is also a Jhala Rajput, was born in 1868 and succeeded in 1908. His State extends over 343 sq. m. with a pop. of 35,422 and an annual revenue of 9 lakhs. Limbdi town is noted for the manufacture of ivory bangles and brass-plated boxes.

126 m. **Botad station**. Frontier of the Bhaunagar State. Branches to (1) **Jasdan**, capital of the State of that name, and (2) Dhanduka and thence to Dholka and Ahmadabad.

153 m. from Ahmadabad *via* Wadhwan is **Dhola** junction station (R.). From here the *Gondal-Porbandar Railway* runs W. to Dhasa, Jetalsar, Dhoraji and Porbandar; a branch of the Bhaunagar State Ry. goes S. to (23 m.), Sava Kundla, and 72 m., Mahuva, on the Gulf of Cambay, with a jn. at Dungar to Port Albert Victor. Two interesting excursions can be made if the visitor continues; E. to Bhaunagar by the main line of the *Bhaunagar State Railway*.

87 m. from Wadhwan jn. on this line and 165 m. from Ahmadabad is **Songadh**.

The antiquarian may halt at Songadh to visit the site of the ancient city of **Valabhipur**, which is nearly identical with the modern town of Vala, 12 m. N. by road. The authorities at Songadh will arrange for the journey; or the visitor may travel by road from Dhola Jn., on the Bhaunagar State Ry., by a conveyance which will be supplied by the Vala State, if application be made beforehand.

Valabhipur, the capital of all this part of India, was perhaps as old as Rome. The present town of Vala (under 4000 inhabitants) is the capital of the small State of that name. There are scarcely any architectural remains at Vala, but old foundations are discovered, and coins, copper plates, mud seals, beads, stone bulls, and household images have been found in some abundance. Specimens of these have been placed in the Museum. The ruins can be traced over a large area.

Resuming the railway route from Songadh to Bhaunagar, the traveller passes, 90 m. from Wadhwan, **Sihor** station (D.B.), jn. for Palitana, 17 m. Sihor was at one time the capital. The town, 1½ m. S. of the railway, has interesting Hindu temples. The

name is a corruption of "Singhpur," "the lion's city"; a still more ancient name is "Saraswatur." It is famous for copper and brass work, snuff and plaster (chunam). Near the S. wall is situated Brahma Kund, the water of which possesses special virtue for the bather. Farther up the River Gautami lie the Gautam Kund and Gautameswar Mahadev.

Palitana, * 17 m. by rail from Sihor stn. is much enriched by the pilgrims who reside in it during their visit to the *Holy Mountain* of Satrunjaya and its famous Jain temples. The present Thakore Sahib, Sri Bahadursinhji Mansinhji, who is a Gohel Rajput, of the same clan as the Maharaja of Bhaunagar, was born in 1900 and succeeded in 1905; he was educated at Shrewsbury and received full powers in 1919. In the present year (1928) he was deputed to attend the League Assembly at Geneva. The State covers an area of 288 sq. m. with a pop. of 58,000 and an annual revenue of 9½ lakhs. There is a State Paddock, where horse-breeding from pure Kathi stock is carried on.

The distance from Palitana to the foot of *Satrunjaya*, or the *Holy Mountain*, 1977 ft. above sea-level, is 1½ m. The road is level, with a good water supply, and shaded. The ascent begins with a wide flight of steps, guarded on either side by a statue of an elephant. The hillside is in many places excessively steep, and the mode of conveyance is a *dholi*—a seat or tray 18 in. square, slung from two poles and carried by four men. As few of the higher-class pilgrims are able to make the ascent on foot, there is an ample supply of *dholis* and bearers.

The *Satrunjaya* Hill is truly a city of temples (863 in all), for, except a few tanks, there is nothing else within

the gates; there is a cleanliness about every square, passage, porch and hall that is itself no mean source of pleasure. The silence, too, is striking. Now and then in the mornings a bell sounds for a few seconds, or a drum is beaten for as short a time, and on holidays chants from the larger temples meet the ear; but generally during the afternoon the only sounds are of vast flocks of pigeons that fly about spasmodically from one temple to another. Paroquets and squirrels, doves and ringdoves abound, and peacocks are occasionally met with on the outer walls. The top of the hill consists of two ridges, each about 350 yds. long, with a valley between. Each of these ridges, and the two large enclosures that fill the valley, are surrounded by massive battlemented walls fitted for defence. The buildings on both ridges, again, are divided into 9 separate enclosures called *tuks*, generally containing one principal temple with varying numbers of smaller ones. Each of these enclosures is protected by strong gates and walls, and all gates are carefully closed at sundown.

No attempt is made to describe the shrines in detail; their general character is so often repeated that it would only be possible to do so with the aid of profuse illustrations. The area enclosed on the top is small enough for any one of ordinary activity to see all over it in a two hours' visit.

There is one gate leading into the enclosure, but there are nineteen gates within, leading to the nineteen chief temples. Not far from the *Ram-pol* ("pol" means gate) is a resting-place used by persons of distinction, with a tolerable room surrounded by open arches. There is no accommodation for ordinary European visitors.

Fergusson says¹: "The group-

¹ *Ind. and East. Arch.*, 2, 24.

ing together of their temples into what may be called 'Cities of Temples' is a peculiarity which the Jains practised to a greater extent than the followers of any other religion in India. The Buddhists grouped their stupas and viharas near and around sacred spots, as at Sanchi, Manikyala, or in Peshawar, and elsewhere; but they were scattered, and each was supposed to have a special meaning, or to mark some sacred spot. The Hindus also grouped their temples, as at Bhubaneswar or Benares, in great numbers together; but in all cases, so far as we know, because these were the centres of a population who believed in the gods to whom the temples were dedicated, and wanted them for the purposes of their worship. Neither of these religions, however, possesses such a group of temples, for instance, as that at Satrunjaya. . . . It is a city of the gods, and meant for them only, and not intended for the use of mortals. All the peculiarities of Jain architecture are found in a more marked degree at Satrunjaya than at almost any other known place, and, fortunately for the student of the style, extending over a considerable period of time. Some of the temples may be as old as the 11th century, but the Muslim invaders of the 14th and 15th centuries made sad havoc of all the older shrines, and we have only fragments of a few of them. In the latter half of the 16th century, however, the Jains obtained tolerance and security, and forthwith began to rebuild their old fanes. From 1500 they are spread pretty evenly over all the intervening time down to the present century."

Dr Burgess¹ has given the following general description:—

"At the foot of the ascent there are some steps with many little

canopies or cells, 1½ ft. or 3 ft. square, open only in front, and each having in its floor a marble slab carved with the representation of the soles of two feet (*charan*), very flat ones, and generally with the toes all of one length. A little behind, where the ball of the great toe ought to be, there is a diamond-shaped mark divided into four smaller figures by two cross lines, from the end of one of which a curved line is drawn to the front of the foot. The path is paved with rough stones all the way up, only interrupted here and there by regular flights of steps. At frequent intervals also there are rest-houses. High up we come to a small temple of the Hindu monkey-god, Hanuman, the image bedaubed with vermilion in ultra-barbaric style. At this point the path bifurcates, to the right leading to the N. peak, and to the left to the valley between, and through it to the S. summit. A little higher up, on the former route, is the shrine of Aengar, a Musalman *pir*, so that Hindu and Muslim alike contend for the representation of their creeds on this sacred hill of the Jains."

On reaching the summit of the mountain, a magnificent view presents itself from the top of the walls. To the E. the prospect extends to the Gulf of Cambay near Gogo and Bhaunagar; to the N. it is bounded by the granite range of Sihor and the Chamardi peak; to the N.W. and W. the plain extends as far as the eye can reach. From W. to E., like a silver ribbon across the foreground to the S., winds the Satrunjaya River, which the eye follows until it is lost between the Talaja and Khokara Hills in the S.W.

104 m. from Wadhwan the terminus is at **Bhaunagar**. * The city, of 64,610 inhabitants, founded 1723, stands on a tidal creek that runs into the Gulf of Cambay. It

¹ *The Cave Temples of India.*

has a good safe harbour for shipping of light draught, and carries on an extensive trade, as one of the principal markets and harbours of export for cotton in Kathiawar. The Bhaunagar State has from its first connection with the British Government been administered by men of intelligence, and the town will be found a most pleasing sample of the results of Indian government going hand in hand with European progress. The staple export is cotton. There are no interesting ruins, but abundance of very handsome modern buildings on Indian models, water-works, reservoirs, and gardens; and at the port will be seen an intelligent adoption of modern mechanical improvements. H.H. Maharaja Krishna Kumarsinhji Bhausinhji, who is a Gohel Rajput, was born in 1912 and succeeded in 1919. His territory covers an area of 2860 sq. m. with a pop. of 426,404 and an annual revenue of nearly 96 lakhs. During his minority the administration is being carried on by a Council.

To visit Junagadh, Somnath, Porbandar, or any places in the W., it is necessary to return to *Dhola junction* and change there for *Jetalsar* *via* *Dhasa*.

Jetalsar junction station (R.), 153 m. from Wadhwan. Here the line branches (1) S. to *Veraval* for *Somnath*; (2) W. to *Porbandar* (p. 249); and (3) N. to *Rajkot*, *Wankaner*, and *Wadhwan* (p. 234).

(1) *Jetalsar to Junagadh and Veraval.*

17 m. from Jetalsar is **Junagadh station**, * (D.B. W. of the town, opposite a modern gateway, called the *Reay Gate*), the capital of the State (pop. 32,645), and the residence of the Nawab, Sir Mahabat Khan III., K.C.S.I. (born 1900, succeeded 1911). The name means old fort. The State is a

large one, covering an area of 3337 sq. m. with a pop of 465,493 and an annual revenue of nearly 82 lakhs.

From Junagadh branch lines are opened up to Visavadar and Prachi Road. There is also a line *via* Bantva between Shapur (a station between Junagadh and Veraval) and Saradiya for Kutiana. The Bantva Taluka is owned by Babi Musalmans of the same clan as the Nawabs of Junagadh and Radhanpur.

Situated as it is under the Girnar and Datar Hills, **Junagadh** is one of the most picturesque towns in India, while in antiquity and historical interest it yields to few. The scenery from the hills around is most pleasing, and the place has attractions wanting in most ancient Indian towns, which, as a rule, are situated in uninteresting plains.

The fortifications of the present town were all built by the Muhammadans after the capture of the place by Sultan Mahmud Bigara, of Gujarat, about 1472. The *Nawab's Palace* is a spacious pile of buildings with the Haveli and Darbar Kacheri Hall opposite. The latter is worth a visit. In front of the Darbar is a fine circle of shops with the Aiyena Mahal on the E. Entering the Reay Gate from the station we come to the Orphanage, Jail, and Law Courts; opposite the last is the modern makbara or mausoleum, of the Nawabs, adjoining the public mosque. Further on lie the new Civil Hospital and Zenana Hospital recently built. At the four cross roads adjoining lies the old makbara, a highly finished building. Fergusson says: "There is a cemetery at Junagadh where there exists a group of tombs all erected within last century, some within the last forty or fifty years, which exhibit, more nearly

¹ *Ind. and East. Arch.*, 2, 331.

than any others I am acquainted with, the forms towards which the style was tending. This style is not without a certain amount of elegance in detail. The tracery of the windows is frequently fascinating from its beauty, and all the carving is executed with precision and appropriateness; but it is all wooden." Entering the enclosure by the N. gate, the tomb of Nawab Bahadur Khan II. (died 1840) is in front on the left, next to it the tomb of Nawab Hamid Khan II. (died 1851) and on its left that of Laidibu Bibi. Beside these is the tomb of Nawab Mahabat Khan (died 1774) in Saracenic style, and finely carved. The tombs of Bibi Najobibi and her notorious servant, Chaitibu, are to be found at Bara Saiyad in another quarter of the town, and will repay a visit.

Outside the town lies the new suburb containing the Official Residence, a Gymkhana, the Arts College, the Huzur Offices, the Lines of the Imperial Service Lancers, the well-known Junagadh quarries and a High School. The College which was designed and built by a local architect and contains a very fine hall, was opened by Lord Curzon in 1900. Both in and outside the walls many improvements have been carried out during recent years. State Departments and Institutions are efficiently housed and managed, and roads have been widened and improved. Separate State guest-houses are maintained for Europeans and Indians of status.

The State Gardens, Moti Bag, Sardar Bag, Lal Bag, the new Diagonal Garden and the Sakar Bag are a great feature of the place. They have recently been restored and laid out and are picturesquely situated. The Zoological Collection, including Gir lions successfully bred in captivity, is housed in Sakar Bag, 1 m. to the N. of the State Paddock, where the famous Kathi breed of horses can be inspected with advantage.

The soft sandstone which everywhere underlies Junagadh is formed apparently in very shallow water, showing on all sides complicated lines of stratification. The facility with which the stone is worked may be one reason why it has been largely excavated into cave-dwellings in Buddhist times.

The Caves.—In the N. part of the town enclosure, near the old telegraph office, is the group of caves called the *Khapra Khodia*. These caves appear to have been a monastery, and bear the cognisance of the then ruling race—a winged griffin or lion. They seem to have been two or three storeys high. They are excavated in good building stone, and the modern quarrymen have been allowed to encroach and injure them; but they have recently been cleaned out and built up with supporting masonry. The most interesting caves of all (which are now protected by an iron gate) are in the Uparkot (p. 240) about 50 yds. N. of the great mosque. They consist of two storeys, the lower chambers being 11 ft. high. The upper storey is made up of a tank surrounded by a corridor, and of a room 36 ft. by 28 ft., supported by six columns, beyond which is a small kitchen. From here a winding staircase leads to the lower storey, measuring 39 ft. by 31 ft., with broad recesses all round it, and over them a frieze of chaitya windows. Of the columns, Dr Burgess says: "Few bases could be found anywhere to excel in beauty of design and richness of carving those of the six principal pillars." Inside the Waghewari Gate, through which the Girnar Mount is reached, are the caves known by the name of *Bawa Piara*—a comparatively modern Hindu ascetic who is said to have resided in them. These caves which date from about the time of Asoka (272-231 B.C.), are among the very oldest in all India.

and are nearly all small and plain. They are situated in the scarp of a circular detached mass of rock, and face S. and E., a third line to the N., also facing S., being excavated on a higher level than the S. line. Facing E., a number of caves were dug round a central space.

The Uparkot, on the E. side of the city, used as a jail until 1858, is now practically deserted, though modern waterworks are now located on its S. aspect. It was the citadel of the old Hindu Princes, and is probably the spot from whence Junagadh derives its name. Without presenting any very special features, the Uparkot is a most interesting old fort. The parapets on the E., where the place is commanded by higher ground, have been raised at least three times to give cover against the increasingly long range of projectiles. The views from the walls are delightful. Here were quartered the lieutenants of the great Asoka, and later of the Gupta Kings. The entrance is beyond the town in the W. wall, and consists of three gateways, one inside the other. The fort walls here are from 60 to 70 ft. high, forming a massive cluster of buildings. The inner gateway, a beautiful specimen of the Hindu Toran, has been topped by more recent Muhammadan work, but the general effect is still good and, with the approach cut through the solid rock, impressive. On the rampart above the gate is an inscription of Mandalika V., dated 1450. About 150 yds. to the left, through a grove of *sitaphal* (custard apples), may be seen a huge 10-in. bore cannon of bell-metal, 17 ft. long and 4 ft. 8 in. round at the mouth. This gun was brought from Diu, where it was left by the Turks. There is an Arabic inscription at the muzzle, which may be translated: "The order to make this cannon, to be used in the service of the Almighty,

was given by the Sultan of Arabia and Persia, Sultan Sulaiman, son of Salim Khan. May his triumph be glorified, to punish the enemies of the State and of the Faith, in the capital of Egypt, 1531." At the breech is inscribed: "The work of Muhammad, the son of Hamza." Another large cannon called Chudanal, also from Diu, in the S. portion of the fort, is 13 ft. long, and has a muzzle 4 ft. in diameter. Near this is the *Jami Masjid*, evidently constructed from the materials of a Hindu temple built by Mahmud Bigara. The mosque is much ruined.

The Tomb of Nuri Shah, close to the mosque, is ornamented with fluted cupolas, and a most peculiar carving over the door. There are two Wells in the Uparkot—the *Adi Chadi*, said to have been built in ancient times and named after slave girls of the Chudasama rulers, is descended by a long flight of steps (the sides of the descent show the most remarkable overlappings and changes of lie in the strata, for which alone it is worth a visit to any one with geological tastes); and the *Naughan*, cut to a great depth in the soft rock, and with a wonderful circular staircase.

There is a fine dharmshala belonging to the goldsmiths near the Wagheshwari Gate.

Girnar.—This mountain is the great feature of Junagadh, and the Jain temples upon it are amongst the most ancient in the country. It is 3666 ft. high, and is one of the most remarkable mountains in India. From the city of Junagadh only the top of it can be seen, as it has in front of it lower hills, of which Jogniya, or Laso Pawadi, 2527 feet, Lakhshman Tekri, Bensla, 2290 ft. high, and Datar, 2779 ft. high, are the principal. Girnar, which was anciently called Raivata, or Ujjayanta, is sacred amongst the Jains to Nemnath, the 22nd Tirthankar, and was, doubt-

GIRNAR.



Scale of Miles

Stanford's Geog. Estab.

- | | |
|------------------------|-----------------------------------|
| 1. Wagheshwari Gate. | 12. Máliparab Khund. |
| 2. Asoka's Stone. | 13. Datátari. |
| 3. Bridge. | 14. Háthi pagla Khund. |
| 4. Temple of Damodar. | 15. Sesáwan Temple. |
| 5. " " Savanath. | 16. Hanmandhára Khund and Temple. |
| 6. " " Bhavanath. | 17. Kamandal Temple. |
| 7. Chadá-ni-wao Well. | 18. Sakri ámbli. |
| 8. Wagheshwari Temple. | 19. Malbela. |
| 9. Bhairo-Thumpa. | 20. Suraj Khund. |
| 10. Gaomukhi Temple. | 21. Sarkharia. |
| 11. Amba Deva Temple. | 22. Bawaha Madhi. |

less a place of pilgrimage before the days of Asoka (272-231 B.C.).

The traveller, in order to reach Girnar, passes through the Wagheswari Gate, which is close to the Uparkot. At about 200 yds. from the gate, to the right of the road, is the Temple of Wagheswari, which is joined to the road by a causeway about 150 yds. long. In front of it is a modern temple, three storeys high, very ugly, flat-roofed, and quite plain. About a furlong beyond this is a stone bridge, and just beyond it, on the right, is the famous **Asoka Stone**, a round boulder of granite, measuring roughly 20 ft. by 30 ft., and covered with inscriptions, which prove on examination to be fourteen Edicts of Asoka (250 B.C.).¹ Nearly identical inscriptions have been found at Dhauli and Shahbazgarhi (pp. 383 and 510) and elsewhere. The character is Brahmi as at Delhi (p. 309).

On leaving Asoka's Stone the route crosses the handsome bridge over the Sonarekha, which here forms a fine sheet of water, then passes a number of temples, at first on the left bank of the river and then on the right, where Jogis go about entirely naked, to the largest of the temples dedicated to **Damodar**, a name of Krishna, from **Dam**, a rope, because by tradition his mother in vain attempted to confine him with a rope when a child. The reservoir at this place is accounted very sacred. The path is now through a wooded valley, with some fine Indian fig-trees. Near a cluster of them is an old shrine called **Bhavanath**, a name of Siva, and round it are a number of large monkeys, who come on being called. Most persons who are not active climbers will probably proceed up the

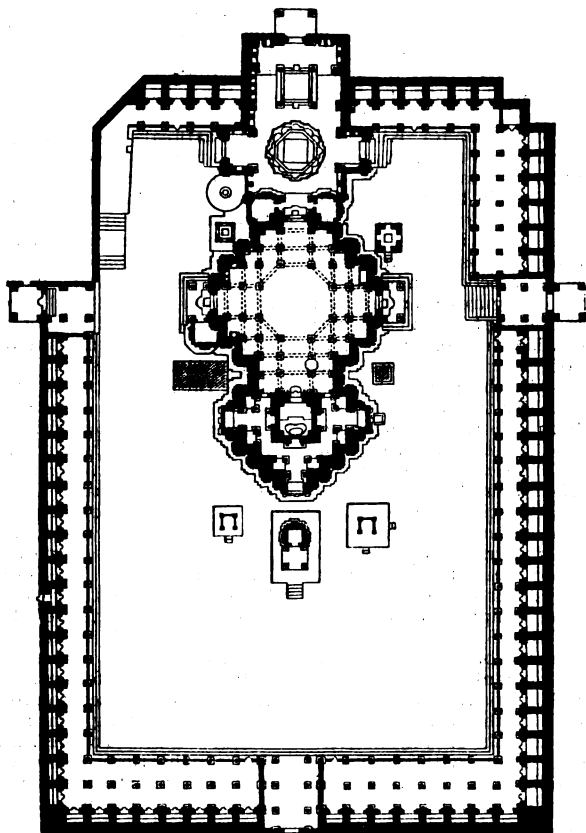
mountain in a swing *dholi* (p. 207), for which Rs.5 or Rs.6 will be paid, according to tariff. A long ridge runs up from the W., and culminates in a rugged scarped rock, on the top of which are the temples. Close to the old shrine is a well called the **Chadani-wao**. The paved way begins just beyond this, and is now continuous from the foot of the hill up the precipice and over the three peaks. The way is paved with dressed granite blocks, with parapets and easy steps, and now presents no danger. The first R.H., **Chodiaparaba**, is reached 480 ft. above the plain, and the second halting-place, at **Dholi-deri**, 1000 ft. above the plain. From here the ascent becomes more difficult, winding under the face of the precipice to the third R.H., 1400 ft. up. So far there is nothing very trying to any one with an ordinarily steady brain. But from this point the path turns to the right along the edge of a precipice, which, though improved of late, is still very narrow, the *dholi* almost grazes the scarp, which rises perpendicularly 200 ft. above the traveller. On the right is seen the lofty mountain of **Datar**, covered with low jungle. At about 1500 ft. there is a stone dharmasala, and from this there is a fine view of the rock called the *Bhairav-Thampa*, "the terrific leap," because devotees used to cast themselves from its top, falling 1000 ft. or more.

At 2370 ft. above Junagadh the gate of the enclosure known as the **Deva Kota**, or **Ra Khengar's Palace**, is reached. On entering the gate the large enclosure of the temples is on the left, while to the right is the old granite temple of **Man Singh**, **Bhoja Raja** of Cutch, and farther on the much larger one of **Vastupala** (p. 244). Built into the wall on the left of the entrance is an inscription in Sanskrit. Some sixteen Jain temples

¹ See *Life of John Wilson, F.R.S.*, by Dr G. Smith, for picture and account of the stone; or Dr. Burgess, *Second Archaeol. Rep.*

here form a sort of fort on the ledge at the top of the great cliff, but still 600 ft. below the summit. The largest temple is that of *Nemnath* (see plan, below), stand-

passage with many images in white marble. Between the outer and inner halls are two shrines. The outer hall has two small raised platforms paved with slabs of



Temple of Nemnath, Girnar.

ing in a quadrangular court 195 ft. by 130 ft. It consists of two halls (with two porches, called by the Hindus *mandapams*), and a shrine, which contains a large black image of Nemnath, the 22nd Tirthankar, with massive gold ornaments and jewels. Round the shrine is a

yellow stone, covered with representations of feet in pairs, which represent the 2452 feet of the first disciples. On the W. of this is a porch overhanging the perpendicular scarp. On two of the pillars of the mandapam are inscriptions dated 1275, 1281, and 1278—dates

of restoration, when Dr Burgess says it was covered with a coating of chunam, and "adorned with coats of whitewash" within. The enclosure is nearly surrounded inside by 70 cells, each enshrining a marble image, with a covered passage in front of them lighted by a perforated stone screen. The principal entrance was originally on the E. side of the court; but it is now closed, and the entrance from the court in Ra Khengar's Palace is that now used. A passage leads into a low, dark temple, with granite pillars in lines. Opposite the entrance is a recess containing two large black images; in the back of the recess is a lion rampant, and over it a crocodile in bas-relief. Behind these figures is a room from which is a descent into a cave, with a large white marble image, an object of the most superstitious veneration by the Jains, which the priests usually try to conceal. It has a slight hollow in the shoulder, said to be caused by water dropping from the ear, whence it was called *Amijhera*, "nectar drop." In the N. porch are inscriptions which state that in Samvat 1215 certain Thakurs completed the shrine, and built the Temple of Ambika. After leaving this there are three temples to the left. That on the S. side contains a colossal image of Rishabha Deva, the 1st Tirthankar, exactly like that at Satrunjaya, called Bhimpadam. On the throne of this image is a slab of yellow stone carved in 1442, with figures of the 24 Tirthankars. Opposite this temple is a modern one to Panchabai. W. of it is a large temple called *Malakavisi*, sacred to Parasnath. N. again of this is another temple of Parasnath, which contains a large white marble image canopied by a cobra, whence it is called *Sheshphani*, an arrangement not unfrequently found in the S., but rare in the N. It bears a date=1803. The last temple to the N. is *Kumarapala's*,

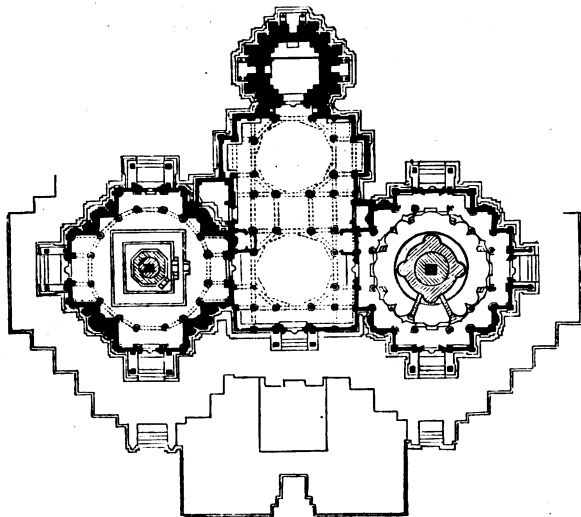
which has a long, open portico on the W., and appears to have been destroyed by the Muhammadans, and restored in 1824 by Hansraja Jetha. These temples are along the W. face of the hill, and are all enclosed. Outside, to the N., is the Bhima Kunda, a tank 70 ft. by 50 ft., in which Hindus bathe. Immediately behind the temple of Nemnath is the triple one erected by the brothers *Tejapala* and *Vastupala* (built 1177). The plan is that of three temples joined together. The shrine has an image of Mallinath, the 19th Tirthankar. Farther N. is the temple of *Samprati Raja*. This temple is probably one of the oldest on the hill, date 1158. Samprati is said to have ruled at Ujjain in the end of the 3rd century B.C., and to have been the son of Kunal, Asoka's third son. S. of this, and 200 ft. above the Jain temples, is the *Gaumukhi Shrine*, near a plentiful spring of water. From it the crest of the mountain (3330 ft.) is reached by a steep flight of stairs. Here is an ancient temple of Amba Mata, which is much resorted to by newly-married couples of the Brahman caste. The bride and bridegroom have their clothes tied together, and, attended by their male and female relations, adore the goddess and present coconuts and other offerings. This pilgrimage is supposed to procure for the couple a long continuance of wedded bliss. To the E., not far off, are the three rocky spires of the Gorakhnath, the Nemnath or Gúrúdatáraya, and the Kalika peaks.

S.E. of the Kalwa Gate of Junagadh is the *Shrine of Jamal Shah*, or *Datar*. After passing under a low arch near the city, the house of the Mujawir, or attendant of the shrine, is seen in front. To the right is a stone platform surrounding an unusually fine mango-tree, with a tank just

beyond, and the shrine of Datar, a building 30 ft. high with a fluted cone at top. Here it is necessary for a visitor to take off his shoes. The shrine and the whole place are very attractive.

There is a *Lepor Asylum* near the Datar Temple for 100 lepers of both sexes, built at the expense of the Wazir Sahib Bahu-ud-din. H.R.H. Prince Albert Victor laid

house at the landing-place. This is a very ancient seaport, and probably owes its existence to its more celebrated neighbour *Patan Somnath*. It rose into notice during the time of the Gujarat Sultans, and in their reigns became, until superseded by Surat, the principal port of embarkation for Muhammadan pilgrims to Mecca. It is still a flourishing little seaport. In the Temple *Harsad Mata* is a



Temple of Tejapala and Vastupala, Girnar.

the foundation-stone in 1890. Above it, 4 m. in S.E. direction, is the *Datar Peak* (2779 ft.). On the summit of the hill is a small shrine, and from it a very beautiful view. The hill is held sacred by Muhammadans and Hindus alike, and is supposed to have a beneficial effect on lepers, who repair to it in considerable numbers.

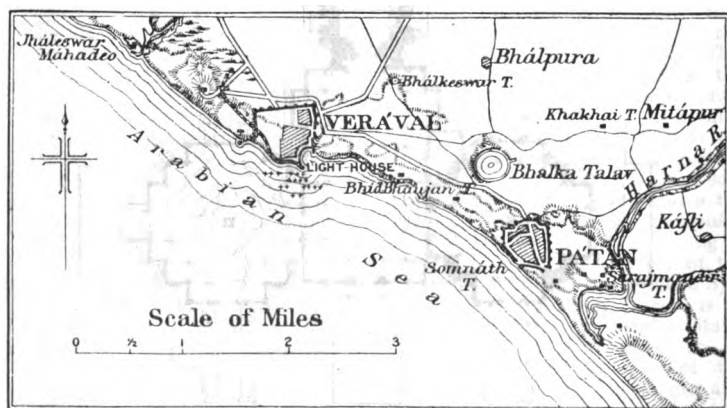
67 m. from *Jetalsar* is *Verával* station. The railway terminus is on the W. side of the city (pop. 19,538), close to the walls, and about $\frac{1}{4}$ m. from the light-

celebrated inscription (1264), recording that a mosque was endowed in that year and bearing dates in four different eras. It was from this inscription that it was discovered that the Valabhi era commenced in 319 A.D. and the Sri Singh era from 1113 A.D. The River *Devka* flows to the N. of *Verával*, and joins the sea at a place called *Dani Baru*. The *Jhalesvar Temple*, about 2 m. N.W. from the town, at the mouth on the right bank, is of great antiquity. Half-way to it, on the sand dunes, is the R.H. of the

Junagadh State. On the S.W. face of Verával there is a modern sea-wall and a stone pier with a lighthouse. Harbour works have been constructed with a break-water and foreshore pier. A railway now connects Verával with Prachi Road; and a further extension to Jamwala is in progress. A large *Custom House* has been built on the sea face, and near it is a *dock estate*, established on reclaimed land.

On the sea-shore, nearly 3 m. to

from Pátan, is the only place in India where there are one or two separate communities of African negroes. Mahmud of Ghazni conquered the town in 1025 A.D., and it appears that he left behind a Muhammadan Governor. Subsequently the Hindus recovered their power, but it was again cast down by Allaghkhan, circa 1300 A.D., and the coast belt or Nagher kingdom was conquered. From this date Muhammadan supremacy prevailed throughout the belt, and



Verával and Pátan.

the S.E., is Pátan Somnath (R.H), also known as Prabhas Pátan, or Deva Pátan, the *Semenal* of Marco Polo. There is a horse tramway between Verával and Pátan Somnath. The anchorages at Verával and Pátan are so bad that it is hard to account for the undoubted fact that from the earliest times they carried on a trade with the Red Sea, Persian Gulf, and African coast. The place is renowned in Hindu mythology. It was here the Jadavs slew each other, and here Krishna, the late legends of whom are connected with Kathiawar as the earlier ones are with Muttra (p. 255), was shot by the Bhil. In the Gir Forest, inland

from the reign of Muhammad Tughlak governors were regularly appointed. Through the gallantry and statesmanship of Diwan Amarji, it was conquered by the Nawab of Junagadh, in whose hands it remains.

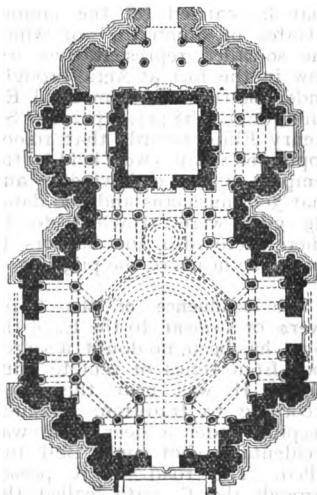
Proceeding from Verával to Pátan (population 6867), to the right is a vast burial-ground, with thousands of tombs, and *palias*. There are also buildings which well deserve examination after the traveller has seen the city. The Junagadh, or W. Gate, by which Pátan is entered, is a triple gate of Hindu architecture. The centre part of the first division of the gateway is very ancient, and has a

carving of two elephants on either side pouring water over Lakshmi, whose figure is almost obliterated.

After passing the second gate the W. wall of a mosque of the time of Mahmud is seen on the left. There is no inscription, but its antiquity is undoubted. After passing the third portal of the Junagadh Gateway there are four stones on the right hand, of which two have Gujarati, and two Sanskrit inscriptions. Driving on straight through the bazar, which is very narrow, and has quaint old houses on either side, the *Jami Masjid* is reached. The entrance is by a porch, which has been a mandir in front of a Hindu temple. The most interesting part of this very ancient building is that in each of the four corners is a carving of two human figures with the Bo-tree between them. A low door in the W. side of the porch leads into the court of the mosque, which was deserted for twenty-five years, and inhabited by Moslem fishermen, who dried their fish in it, but is now used again.

To reach the **Old Temple of Somnath** it is necessary to drive to the end of the bazar of Pátan and turn to the right. The structure is close to the sea. Fergusson considers that it was probably never a large temple, but adds¹ that the dome of its porch, which measures 33 ft. across, is as large as any we know of its age and type. The interior of the porch is even now in its ruins very striking. "From what fragments of sculptured decorations remain, they must have been of great beauty." It was, no doubt, like the temple of Nemnath, on Girnar, surrounded by an enclosure which would make it a strong place. The temple now stands alone, stripped even of its marble, like, but superior to, the temples of Dabhoi and Lakkundi. There

are three entrances to the porch, and a corridor round the central octagonal space, which was covered by the great dome. There are four smaller domes. The dome in the centre is supported by eight pillars and eight arches. The pillar on the right hand, looking from the E., next but one before reaching the adytum, has an inscription, which is illegible except the date, Samwat 1697=



Plan of Temple of Somnath, by
Dr J. Burgess.

1640 A.D. The walls on the N., S., and W. sides have each two handsomely-carved niches, in which there have been idols.

The temple is said to have been first built of gold by Somraj, then of silver by Ravana, then of wood by Krishna, and then of stone by Bhimdeva. Though three times destroyed by the Muhammadans, it was nevertheless three times restored, and so late as 1700 A.D. was still a place of great sanctity. But in 1706 Aurangzeb ordered its destruction, and brought it to a final state of ruin.

¹ *Ind. and East. Arch.*, 2, 35.

The celebrated expedition of Sultan Mahmud of Ghazni to Somnath took place in 1024 A.D. He marched with such rapidity, by way of Gujarat, that the Hindu Rajas were unable to collect their forces for its defence, and after a sharp fight for two days, he conquered both the city and the temple. Immense spoil was found in the temple, and after a short stay Mahmud returned to Ghazni. It was on this occasion that he carried off the famous "Gates of Somnath," of which the so-called representatives are now in the fort at Agra, brought under instructions from Lord Ellenborough in 1842 (see p. 276). Sir Henry Elliot records that 10,000 populated villages were held by the temple as an endowment, and that 300 musicians and 500 dancing-girls were attached to it. There were also 300 barbers to shave the heads of the pilgrims.

The confluence of the Three rivers or *Tribeni*, to the E. of the town, has been, no doubt, a sacred spot from times of remote antiquity. It was near this that, according to tradition, Krishna, sleeping under a deer-skin, was accidentally shot by a Bhil and killed. The road to it passes through the E. gate, called the *Nana*, or "small gate," also the *Sangam*, or "confluence gate." It has pilasters on either side, and on the capitals figures are represented issuing out of the mouths of Makaras, fabulous crocodiles which in Hindu mythology are the emblems of the God of Love. About $\frac{1}{4}$ m. outside the gate is a pool on the right hand, called the *Kund*, and a small building on the left, called the *Adi Tirth*, and next to these is a temple and the *Tirth* of *Tribeni*, where people are always bathing. The stream here is from 100 yds. to 200 yds. broad, and runs into the sea. N. of this, about 200 yds. off, is the *Sura Mandir*, or Temple to the Sun, half

broken down by Mahmud, standing on high ground, and wondrously old and curious. Over the door of the adytum are groups of figures, with a tree between each two. Inside the adytum is a round red mark for the sun, not ancient; and below is a figure of a goddess, also coloured red. On the W. and S. outer walls are masses of carving much worn. At the bottom there is a frieze of *Keshari* lions—that is, lions with elephants' trunks. This temple is probably of the same age as that of Somnath. About 250 yds. to the W. is a vast tomb, quite plain; and below, in a sort of quarry, is a subterraneous temple; which is called *Ahdi Shah's*. The same name is given to a mosque with six cupolas to the N., which has been a Hindu temple.

200 yds. to the N.W., inside the *Nana Gate*, will be found the temple built to replace the ancient Somnath. Below it is another reached by descending 22 steps. The dome of this subterraneous building is supported by 16 pillars. The temple itself is 13 ft. square. It is of no interest except on account of its builder, *Ahalya Bai* (p. 148).

Returning towards *Veraval*, about $\frac{1}{4}$ m. outside the *Junagadh Gate*, is the *Mai Puri*, which in ancient times was a temple of the sun. The carving of this building is exquisite, and in better preservation than that of the Somnath temple. In the centre of the building is an enclosure 6 ft. sq., in which *Mai Puri*, "the Perfect Mother," is buried. A legend states that she brought about the siege of Somnath by Mahmud. The temple (or mosque, as the Moslems have made it) contains a mass of old Hindu carving, still beautiful, though mutilated. Not far from the *Mai Puri* is the tomb of *Silah Shah*. To the S.E., about 50 yds., is the tomb of *Mangroli Shah*, which has been restored.

Before reaching the shrine the visitor passes through the porch of an ancient Hindu temple.

Near this spot is the *Bhid Bhaujan Pagoda* on the shore, locally known as Bhidiyo—very old, perhaps of the 14th century. It is 60 ft. high, and forms a good mark for sailors.

Various coasting steamers call at Veraval regularly, and the journey can be made by sea to Bombay or to Porbandar, Cutch, or Karachi.

The island of *Diu* (7 m. long from E. to W. and 2 m. at its broadest point from N. to S.) is separated from the S. extremity of the Kathiawar peninsula by a narrow channel. Diu town and fort (constructed in 1545) stand at the E. of the island, which forms part of the Portuguese possessions in India and is administered by a governor subordinate to Goa (p. 556). Its history has been uneventful since 1670, when it was raided by Arabs from Maskat. The village of Goghla, on the mainland opposite, is also Portuguese.

(2) *Jetalsar to Porbandar.*

9 m. *Dhoraji*, an important commercial town. There is tramway communication between the railway station and the town.

78 m. from Jetalsar is **Porbandar** terminal station, E. of the town (D.B.) (pop. 29,390), which is the capital of the State and a place of some interest. H.H. Maharaja Shri Natvarsinhji Bhavsinhji, a Jethwa Rajput, was born in 1901 and succeeded in 1908. He received full powers in 1920. The area of the State is 642 sq. m., with a pop. of 1,01,881 and an annual revenue of nearly 23 lakhs. There is a quarry at Adatiana, the stone from which is famous; and a Portland cement factory at Porbandar. In spite of the levy of heavy customs dues and the competition of other

ports, commerce is considerable, including besides a local traffic with the Konkan and Malabar coast, a brisk trade with the Persian Gulf, Arabia, and the E. coast of Africa. Silk of good quality and cotton cloth are manufactured. It is identified with the ancient city of Sudâmapuri, known to the readers of the *Bhagavata*. Near this is an old temple of Sudâma. The line is continued for goods traffic along the shore to the creek W. of the town, where it terminates in a wharf. The place is a very old-world corner, very interesting to those who have leisure, or to sportsmen. Coasting steamers between Bombay and Karachi touch at Porbandar.

The places of interest in the neighbourhood are :—

(a) *Srinagar*, 9 m. N.W. of Porbandar, believed to have been the first capital of the Jethwa Rajputs, who claim descent from Hanuman, the faithful friend and ally of Rama. There are remains of an ancient temple of the sun.

(b) *Miani*, a very ancient seaport 18 m. N.W. of Porbandar.

(c) *Chaya*, a village 2 m. S.E. of Porbandar, was once the capital of the State. The old Palace is still there.

(d) *Bileswar*, 8 m. N. of Ranawao station, a small village E. of the Barda Hills. There is here a fine temple of considerable antiquity, well preserved.

(e) *Ghumli*, or *Bhumli*, is about 12 m. N. of Bileswar, or 24 m. from Porbandar by the road passing W. of the Barda Hills. This place which is now absolutely ruined, was the capital of the Jethwa Rajputs when at the zenith of their power. It lies in a gorge of the Barda Hills; the ruins are of the 11th or 12th century.¹ The chief remains are the Lakhota, Ganesh Dehra, Rampol, Jeta Wao, the temples near the Son Kansari Tank, and some ruins on the

¹ Ghumli is illustrated in Dr Burgess's *Second Archaeol. Rep.*

summit of Abapura Hill. It is about 4 m. S. of Bhanwar, a fort belonging to the Maharaja Jam Sahib of Nawanager.

40 m. S.E. from Porbandar, is **Madhavapur**, where Krishna is said to have been married. There is a temple dedicated to him.

(3) *Jetalsar to Rajkot, Wankaner, and Wadhwan.*

23 m. **Gondal** (Guest House, D.B.) is the capital of the Gondal State and the residence of the Maharaja, Sir Bhagwatsinhji Sagramji, G.C.I.E., a Jareja Rajput, who was born in 1865 and succeeded in 1869. He received full powers in 1884, after completing his education at Edinburgh, where he took the degrees of M.D. and F.R.C.P., H.H. is also a D.C.L. of Oxford and LL.D. of Edinburgh. Gondal is a cheerful well-kept town, with many handsome temples. The public offices are situated outside the town on open sites surrounded by gardens. The courtyard of the Palace is very handsome. Gondal has always been pre-eminent amongst the States of its class for the vigour and success of its public works. It has a College for the sons of Girassias who cannot afford the Rajkumar College at Rajkot, which is magnificently equipped and run on modern Public School lines. It surpasses all other Kathiawar schools in its methods. The town also contains the Bai Sahib Asylum, the Bhagwatsinhji Orphanage, a Girls' High School, and waterworks for irrigation and water supply. Various other large buildings are all well designed and equipped. The State covers an area of 1024 sq. m. with a pop. of 167,071 and an annual revenue of 25 lakhs.

46 m. **Rajkot station**, a civil and military station (pop.: city, 36,097; civil station, 9,788), the hdqrs. of the Agent to the Governor-General

for the Western States of India, and of the Political Agent, Western Division. It is also the capital of the State of that name, which covers an area of 282 sq. m. with a pop. of nearly 61,000 and an annual revenue of 11 lakhs. The Thakore Sahib, Sir Lakhaji Raj, K.C.I.E., who is a Jareja Rajput, was born in 1885 and succeeded in 1890; he received full powers in 1907.

The most important public work in Rajkot is the *Kaisar-i-Hind Bridge* over the Aji River, built by Mr R. B. Booth, whose name is connected with nearly every important modern building in the Agency. The total cost of the bridge was Rs.117,500, of which the late Maharaja of Bhaunagar paid all but Rs.7500.

At the *Rajkumar College* the young Princes of Kathiawar, Gujarat, and other Agencies are educated. It was founded by Colonel R. H. Keatinge, V.C., and was opened in 1870. On the ground floor is a fine hall, surrounded by class-rooms. Along both fronts is a massive veranda, and over the E. entrance a rectangular tower 55 ft. high. The entrance is on the W., and is flanked by two circular towers. The N. and S. wings contain forty suites of bedrooms and sitting-rooms, bathrooms and lavatories. To the W. of the N. wing is a chemical laboratory, and on the opposite side are a gymnasium and racquet-court. N. of the laboratory are extensive stables. The young Princes, besides playing all manly games, are drilled as a troop of cavalry. W. of the quadrangle are the houses of the Principal and Vice-Principal, with extensive gardens. S. of the buildings is the cricket-field of 19 acres. Other features are the Ranjitsinhji Swimming-bath and the Hide Sanatorium. The late Maharaja of Bhaunagar, who was educated at the College, presented a lakh of rupees for the building of

the Principal's residence and one of the wings, and contributed a further sum of Rs.50,000 to the Endowment Fund.

The *High School* was opened in January 1875. It was built at the expense of the Nawab of Junagadh, and cost Rs.70,000. In the centre is a fine hall. The *Barton Women's College* is another useful institution.

In Rajkot Civil Station are the Jubilee Gardens, containing the Memorial Institute. It comprises (1) the Lang Library; (2) the Connaught Hall, which is used for public meetings and official Darbars; and (3) the Watson Museum—a famous collection of antiquities, products, and manufactures of Kathiawar. The Connaught Hall contains an excellent statue of Her Majesty Queen Victoria, and portraits of the late Duke of Clarence and the leading Chiefs of Kathiawar.

N.E. of Rajkot there are (1) the *Victoria Jubilee Waterworks*, for the Civil Station; and (2) the *Lalpuri Irrigation Works*, for the Rajkot city, with irrigation canals for the adjoining fields.

The Kathiawar Mail of the B.B. and C.I. Ry. continues from Rajkot to (54 m.) Jamnagar, and thence (138 m.) to Dwarka (603 m. from Bombay) over the Jamnagar-Dwarka Ry., which has its terminus (155 m.) at **Port Okha**.

Jamnagar or Nawanagar (pop. 42,495), is the capital of the State of that name, of which the famous cricketer, Lt.-Col. H.H. Maharaja Jam Shri Sir Ranjitsinhji, G.C.S.I., G.B.E., is Chief. The State extends over an area of 3791 sq. m. with a pop. of 345,353 and an annual revenue of nearly 61 lakhs. His Highness, who is a Jareja Rajput, maintains a regiment of cavalry and another of infantry; and is entitled to a permanent salute of 13 guns and a personal and local salute of two extra guns. He was born in 1872.

and succeeded his cousin in 1907. Marble is found in the Kandorna and Bhanvad Mahals, copper in the Khambhalia Mahal. There is also a pearl fishery lying off the coast of the S. shore of the Cutch Gulf. The Jamnagar dyers are well known, and the town is famous for silken and gold embroidery. The Kotha and Lakhota are very picturesque, and the new palace constructed by the present Maharaja. Small steamers occasionally ply between Bombay and Bedi, near Nawanagar Bandar, where important harbour works have been constructed.

The temples at **Dwarka** ("door") and **Bet** ("island") in the extreme N.W. of Kathiawar, are in the district of **Okhamandal**, which forms part of the territory of the Gaekwar of Baroda. They are among the most sacred *Hindu Temples* in India. Dwarka was the capital of Krishna, who founded it after his flight from Mathura (p. 255), when attacked by Jarasandha, the King of Magadha. It ranks as one of the Great Seven, with Benares, Muttra, Hardwar, Ajudhia (in Oudh), Ujjain, and Conjeeveram (in S. India). The temple of Dwarakanath (a title of Krishna) is believed to have been raised in a single night; and is visited annually by thousands of pilgrims. Bet island is associated with the worship of Vishnu, who is said to have destroyed a demon named Sankhasun here, and to have turned the demon's wife, Tulsi, into the basil plant, which is so-called. The original possessors of Okhamandal were a war-like tribe of Rajputs, called "*Waghirs*," who were notorious pirates up to the early part of the 19th century. Though reduced at that time by the British Government, they still cling to their former traditions, by which each man believes that he is a rightful Prince. The B.I. mail steamers from Bombay to Karachi call between September

and May at Dwarka and Port Okha.

The return journey to Ahmabad is made from Rajkot, whence the *Morvi State Railway* (a metre-gauge line) runs N.E. to Wadhwan, *viâ Wankaner* junction station (26 m.). This is the capital of a small State (417 sq. m. with a pop. of 36,824 and an annual revenue of nearly 8 lakhs). The present Raj Sahib, Sir Amarsinhji Banesinhji, K.C.I.E., who is a Jhala Rajput, was born in 1875 and succeeded in 1881; he received full powers in 1899. The country around is undulating, rising into hills W. and S. From Wankaner there is a branch N. to *Morvi*, the capital of the State of that name (822 sq. m. with a pop. of 96,697 and an annual revenue of nearly 17½ lakhs). The Maharaja, H.H. Shri Lakhdirji Waghji, who is a Jareja Rajput, was born in 1876 and succeeded in 1922. The main line runs E. to (48 m.) Wadhwan and (88 m.) Viramgam (see p. 233). From this point a line runs (41 m.) to Mehsana (see p. 209) for Ajmer and Delhi.

ROUTE 12.

BARODA by B.B.C.I. Ry. (broad-gauge), to **Champaner Road** (for **Champaner** and **Pavagadh**), **Bayana** (junction for Agra), **Bharatpur**, **MUTTRA**, and thence to **DELHI**.

The B.B.C.I. Ry. "Frontier Mail" from Bombay proceeds on the broad-gauge route from **Baroda** (p. 147, Route 10), to

271 m. from Bombay, **Champaner Road** stn. Light ry. (31 m.) to the Pani Mines. The fortified hill of Pavagadh, at the foot of which lies the ruined city of

Champaner, stands out from the plain of Gujarat and is visible for many miles. The hill is about 1 m. from the Pavagadh station on the light ry. from Champaner Road stn. The summit is about 2700 ft. above sea-level and the ascent may be made on foot (2 hrs.) or in dhoolies. It is an all-day trip. D.B. at Halol stn. (7 m. from Champaner Road), 5 m. off; otherwise there is no arrangement for travellers to stop the night at Pavagadh.

Champaner was the ancient fortress-city of local Rajput Kings. After many vicissitudes it was taken, in 1484, by Mahmud Bigara, of Ahmadabad, who made it his capital. In 1535 it was besieged by Humayun, Emperor of Delhi, who, with a small party which he led in person, scaled the precipices of the fort by the aid of iron spikes driven into the rock, and opened the gate to admit his army. There are remains of many mosques, tombs, and tanks in the lower city; and in the forest for miles around, the ruins of massive wells, minarets, and palaces, testify to the former greatness of Champaner.¹

The Jami Masjid has been restored by the Archaeological Department, and is particularly fine. The Borah Masjid is also well worth a visit. The height and strength of the part of the city wall which remains standing give an idea of the importance of the city.

In the ascent of **Pavagadh** there are interesting ruins at the Medi and Medi Talao. Other ruins are the Buria Durwaza, the Champavati or Champa Ranina Mahal, which is a sort of summer-house in three storeys down the face of the hill, the fortifications near the Machhi Haveli, which is half way up, and the gate and fortifications higher up. There is a temple of Bhawani on the summit, which is

¹ For the architecture of Champaner, see Burgess's *Mohammedan Architecture of Gujarat* (1896).

surmounted by a shrine of **Sadan Shah**, a Muhammadan saint. This shrine is built on the spire of the Hindu temple, the top of which has been removed to make room for it—a curious arrangement, which is supposed to represent the triumph of Muhammadan conquerors over the Rajput Chiefs.

293 m. from Bombay **Godhra**, headquarters of the Panch Mahals district of the Bombay Presidency. Branch, 26 m., to Lunawada, chief town of the State of that name (area 388 sq. m., pop. 83,133, annual revenue 4½ lakhs). Another branch, 49 m., to Anand on the main line between Baroda and Ahmadabad (Route 10, p. 199).

338 m. **Dohad**, a place of note under the Kings of Gujarat.

408 m. **Ratlam**, capital of the State of that name (p. 154). Junction for the metre-gauge line from Khandwa to Ajmer (Route 8).

434 m. **Nagda**. Branch line (broad-gauge) of the G.I.P. Ry. to Ujjain and Bhopal (Route 9).

From Nagda the main line of the B.B.C.I. Ry. turns N. and runs to 522 m. **Sri Chatrapur**, 17 m. from **Jhalra Patan**. Both these towns are in the State of Jhalawar, which covers an area of 810 sq. m., with a pop. of 96,182 and an annual revenue of nearly 8½ lakhs. The present Maharaj Rana, H.H. Sir Bhawani Singh Bahadur, K.C.S.I., was born in 1874 and was installed in 1899; the Jhala clan of Rajputs, to which he belongs, claims descent from the Solar race.

At 544 m. **Darah**, the line passes through the famous Mukand Dwara Pass, from which Colonel Monson made his disastrous retreat in the summer of 1804 before Jaswant Rao Holkar; the scenery here is striking, and the engineering of the line is very remarkable.

574 m. **Kotah Jn.** **Kotah** (population 31,707) is the capital of the Kotah State, separated from Bundi (p. 162) in 1625. The Ruling Prince, Lt.-Col. H.H. Maharao Sir Umed Singh Bahadur, G.C.I.E., G.C.S.I., G.B.E., was born in 1873 and succeeded in 1889. His Highness is a Rajput of the Hara sept of the Chauhan clan, and is entitled to a permanent salute of 17 guns and a personal salute of two extra guns. The area of the State is 5684 sq. m., with a pop. of 630,000 and an annual revenue of 46 lakhs. In 1857 the State troops and the Kotah Contingent mutinied and murdered Capt. Burton, the Resident, and his two sons. Kotah is a walled city, picturesquely situated on the right bank of the Chambal; the fine old palace and the royal cenotaphs lie S. of it. The new palace is called the Umed Bhawan. There is a fine General Hospital in the city; also a Hospital for Women, named after Queen Victoria. Other attractive public buildings of interest are the Crosthwaite Institute, situated in the beautiful Public Gardens; the Herbert High School; the Curzon Wyllie Memorial, and the Girls' School. The beautiful lake above the gardens should be seen. There is a well-furnished and comfortable D.B. at Kotah about 3 m. from the railway station. Conveyances for hire meet all the trains. A branch line (broad-gauge) of the G.I.P. Ry. runs from Kotah, 188 m., to Bina jn. (p. 171), through, 115 m., Goona, a former Cantonment of the Central India Horse. From Bina this line continues, 165 m., to Katni jn. on the main line of the G.I.P. Ry. from Bombay to Calcutta, *via* Jubbulpore (Route 2).

N. of Kotah the main line of the B.B.C.I. Ry. passes, 641 m., Sawai Madhpur (population 7450; branch line N.W. to Sanganeer, p. 229), 680 m., Gangapur, and 708 m., Hindaun, all in the Jaipur State,

and the last once a place of importance, but devastated by the Mahrattas.

728 m. from Bombay **Bayana** (Biana) on the bank of the Gambhir River, once a famous city, near which Babar defeated the Sanga Rana (Sangram Singh) of Chitorgarh on 16th March 1527, after sustaining a severe check from this Prince in the previous month; it was from Babar's victory that Sikri received the name of Fatehpur. The Rana, who was the bravest Hindu warrior of his day, is said by Colonel Tod to have borne eighty wounds on his body. He refused to return as a defeated Chief to Chitor; and his grandson, Maharana Udai Singh, deserted that place for Udaipur after its capture by Akbar (p. 156). Bayana belongs to the Bharatpur State, and has a population of 7000. It was first invaded by the Muhammadans under Muhammad Ghori in 1196 A.D. Shortly afterwards it passed back into the hands of the Hindus, but was reconquered by Altamsh in 1235 A.D. It was visited by Akbar in 1601, and the mother of Jahangir planted a garden there, a fine gateway of which still exists. The Muhammadan buildings are numerous and of no little interest. Branch, 53 m., to Fatehpur Sikri, Agra Idgah stn., and **Agra Fort** stn. (Route 13), whence a metre-gauge line of the B.B.C.I. Ry. runs, 94 m., to Bandikui jn. (p. 229), through Bharatpur (see below) and Achnera (branch 39 m. to Muttra).

754 m. from Bombay is **Bharatpur Junction** (D.B., outside Muttra Gate). The metre-gauge line of the B.B.C.I. Ry. from Bandikui Jn. to Agra Fort meets the main broad-gauge line to Delhi here. Bharatpur or Bhurtpore (33,495 inhabitants) is the capital of a Jat State of that name which extends over an area of 1993 sq. m.

with a pop. of 496,437 and an annual revenue of nearly 30 lakhs. The present Maharaja, H.H. Sri Brijendra Singh, Bahadur Jang, was born in 1918 and succeeded his father in March 1929. His palace is at Golbagh, about 1 m. outside the city. The ruling family is descended from a Jat Zamindar named Churaman, who harassed the rear of Aurangzeb's army during his expedition to the Deccan. He was succeeded by his brother, and after him by his nephew, the famous Suraj Mal, who fixed his capital at Bharatpur (1733), and subsequently (1761) drove out the Mahratta Governor from Agra, which he made his own residence. In 1765 the Jats were repulsed before Delhi and driven out of Agra. In 1782 Scindia seized Bharatpur and its territory; but he restored fourteen districts, and when he fell into difficulties formed an alliance with the Jat Chief Ranjit Singh (who ruled between 1763 and 1805). The Jats, however, were defeated by Ghulam Kadir at Fatehpur-Sikri, and were driven back on Bharatpur, but being reinforced at the end of the same year, 1788, they raised the blockade of Agra, and Scindia recovered it. In 1803 the British Government concluded a treaty with Ranjit Singh, who joined General Lake at Agra with 5000 horse, and received territory in return. Upon Ranjit Singh intriguing with Jaswant Rao Holkar, Bharatpur was besieged by General Lake, but four assaults on the fort were repulsed with a loss of 3000 men. The Chief then made overtures for peace, which were ratified on the 4th of May 1805. On troubles breaking out regarding the succession, Bharatpur was again besieged by General Lord Combermere, and on the 18th of January 1826, after a siege of three weeks, the place was stormed. The loss of the besieged was estimated at 6000 men killed and wounded.

The British had 103 killed and 477 wounded and missing. On this occasion again the British artillery was unable to make any real impression on the mud defences of the fort, and the breach was made by the explosion of mines. The treasure taken amounted to 48 lakhs of rupees, of which Lord Combermere took six lakhs as his share.

The Walled City of Bharatpur is an irregular oblong, lying N.E. and S.W. The **Inner Fort**, surrounded by a ditch and a lofty mud wall, is contained in the N.E. half of the outer fort. Three Palaces run right across the centre of the inner fort from E. to W., that to the E. being the Raja's Palace. Next is an old Palace built by Badan Singh. To the W. is a Palace which is generally styled the **Kamra**; it is furnished in semi-European style.

There are only two gates to the inner fort—the **Chauburj Gate** on the S., and the **Assalдати** on the N. The fine bastion at the N.W. corner of the inner fort is called the *Jowahar Burj*, and is worth ascending for the view. N. of the **Kamra Palace** is the Court of Justice, the Jewel Office, and the Jail. On the road between the **Chauburj Gate** of the inner fort and the **Anah Gate** of the outer fort are the **Gangaka Mandir**, a market-place, a new mosque, and the **Lakshmanji Temple**.

A *chhattri* was erected by the late Maharaja in the *Victoria Park Gardens*, in memory of General Sir James Willcocks, who died here in December 1926. Bharatpur is the headquarters of the Political Agent for the Eastern States of Rajputana (Bharatpur, Dholpur, Alwar, Kotah, and Karauli).

775 m. from Bombay by the B.B.C.I. Ry. broad-gauge route is **MUTTRA** (or Mathura). The modern town of Muttra (pop. 52,840) lies on the right bank of

the **Jumna**, and comprises a Municipality in which the City and Civil Lines are included, and a Cantonment (D.B.). The city lies to the N. of the municipal area. S. of this comes the Cantonment, and to the S. of the Cantonment and interlaced with it are the Civil Lines. All are linked up by the main Agra-Delhi Road.

In the Civil Lines are situated the Collectorate Court (*kachahri*), the Civil Law Courts, and other public offices, the Jail, the Museum (see p. 256), the P.W. Inspection Bungalow, the Club, the so-called Cantonment Post Office and the residences of the Civil Officials. Outside the city proper the only other places of interest are the Headquarters Hospital, erected mainly at the cost of Goswami Sri Gobardhan Lalji, the high priest of the Nathdwara temple in Udaipur, in memory of his pilgrimage to Muttra in 1912; the Victoria Memorial; and the Dampier Park and Suburb. All these places lie in a compact block on the main Agra-Delhi Road between the city and Cantonments. The city has recently been equipped with an up-to-date water works installation, the pumping station for which is situated at Laldiggi, not far from Potara Kund (see p. 259) on the Muttra-Gobardhan Road.

In **Cantonments** are situated the D.B. (small and of an indifferent character) and the three Churches, Anglican, Roman Catholic and Nonconformist. The Anglican Church contains a few interesting tablets; the Roman Catholic Church, which was constructed by Mr Growse (a former Collector) is an attempt to combine features of both Western and Oriental architecture. The cemetery, which is just behind the D.B., contains some interesting monuments to the memory of Major-General Frazer of the 11th Regiment of Foot and other officers, who fell at the Battle of Dig in 1804.

Not far from the cemetery is the tomb of Lt. P. H. C. Burlton of the 67th Bengal Infantry, who was shot by his detachment, which mutinied on the 30th May 1857. The English cavalry regiment, which was stationed here for many years, has been withdrawn; and the Cantonments are now occupied by a brigade of artillery.

Railways.—Muttra is served by three railway lines. The G.I.P. main line from Bombay, 868 m., through Jhansi, Gwalior, and Agra Cant. to Delhi; the B.B. and C.I. broad-gauge from Bombay, 775 m., to Delhi, *via* Nagda, and the B.B. and C.I. metre-gauge, 259 m. from Agra Fort and Achnera to Cawnpore, which connects with the R.K.R. and B.N.W.R. metre-gauge systems at Kasganj (for Bareilly and Naini Tal) and Cawnpore respectively and with the E.I.R. system at Hathras Road Junction. All three lines converge at the Junction Station, which is the principal station for travellers proceeding to or arriving from the Bombay, Agra, or Delhi directions. This station is situated about 2 m. from Cantonments and the city, and is equipped with ample waiting-room accommodation and refreshment-rooms. The Cantonment Station (B.B. C.I. metre-gauge only) is conveniently situated on the Delhi-Agra road, about half-way between the city and Civil Lines, and is used mainly by passengers proceeding to or arriving from the Bareilly (Kasganj) or Cawnpore directions. There is no refreshment-room at this station, and the waiting-room accommodation is very limited. Masani Station, formerly called the City Station, is on the branch metre-gauge line from Muttra to Brindaban, and is only used by pilgrims travelling between these two places.

Roads.—The Cantonments and Civil Lines are well laid out with the usual broad roads and avenues

of trees. In the city the roads are extremely narrow.

Motorists proceeding from Agra to Delhi or Brindaban who do not wish to pass through the city, should take the Delhi Branch road, which leaves the Agra-Delhi main road just South of the quarterguard in Cantonments, and, skirting the city, rejoins it outside the Shahganj Gate near the Masani Station. From Muttra there radiate metalled roads to Delhi (98 m.); to Brindaban (6 m.); to Bharatpur (25 m.), to Dig (24 m.); to Agra (35 m.); to Hathras (25 m.). The road to Hathras crosses the Jumna on the B.B.C.I. metre-gauge railway bridge. About 2 m. E. of the railway bridge another metalled road branches off leading to Gokul, Mahaban, Baldeo, and thence to Sadabad and the Etah district.

The Museum of Archæology, situated on the Agra-Delhi Road between the Collector's court-house (*kachahri*) and the Tahsil (*i.e.*, the Tahsildar's Office), contains a remarkable collection of ancient sculptures, inscriptions, and other antiquities found in the Muttra district. The building, which was erected by public subscription at the instance of Mr Mark Thornhill, was originally intended to be a R.H. for Indians of rank, but, being found unsuitable for the purpose, it was converted into a museum by Mr F. S. Growse. "I proposed," Mr Growse wrote, "to make it not a general, but simply an architectural and antiquarian museum, arranging in it, in chronological series, specimens of all the different styles that have prevailed in the neighbourhood, from the reign of the Indo-Scythian Kanishka, in the century immediately before Christ, down to the Victorian period, which could be illustrated in perfection by the building itself." Mr Growse placed in it the sculptures excavated by himself from various

mounds in the neighbourhood of the city of Muttra. Of late years the original collection has been very considerably extended through the efforts of the Honorary Curator, Rai Bahadur Pandit Radha Krishna, and contains now several pieces of unique interest. Among the sculptures of Mr Growse are to be seen particularly the Bacchanalian group of Pali Khera, remarkable for its pronounced classical inspiration, and the exquisitely-carved standing Buddha image of the 5th century A.D., which was unearthed on the site of the Buddhist monastery founded by King Huvishka, now occupied by the Collector's court-house. Among recent acquisitions the following deserve special mention — the colossal statue from the village of Parkham, which belongs to the 2nd century B.C., and is one of the oldest detached images found in Indian soil; and the image of a Nāga, or serpent god, of the reign of Huvishka, which Pandit Radha Krishna obtained from the village of Chhargaoon. The quaint pillar erected outside the museum building is a sacrificial post (*Yupa*) erected by a Brahman in the reign of Vasishka, who must have been the successor of the great Kanishka. Of Kanishka himself the museum possesses a life-size statue, which in a most realistic fashion shows the King's costume and weapons. The head and arms are unfortunately lost. Together with this statue two images were found, one of colossal size, which also must represent Princes of the Kushan dynasty.

An illustrated catalogue by Dr Vogel, of the Archæological Department (Allahabad, 1910) can be purchased at the Museum.

Sport. — Black buck, chinkara and small game abound in the neighbourhood: about 200 boars are speared yearly by the Muttra Tent Club.

History. — Although the present town of Muttra is comparatively modern, the site is of great antiquity, and has been inhabited from at least 600 B.C. The earliest town appears to have been further back from the river towards the modern village of Maholi, but in the course of centuries the city has gradually moved nearer the Jumna. It is possible also that some alterations may have taken place in the position of the latter, due to fluvial action. It is referred to by Ptolemy as *Μόδουρα ἡ τῶν Θεῶν* and was a great Buddhist stronghold in the Buddhist period.

Fa Hian, in the beginning of the 5th century A.D., found that there were 20 Buddhist monasteries with 3000 monks at Muttra: but when Hiuen Tsang visited the place in 634 A.D., the number had declined to 2000. The Buddhists had disappeared when Mahmud of Ghazni came to Muttra in 1017 A.D. He remained there twenty days, pillaged and burned the city, and carried off five golden idols, whose eyes were of rubies, worth 50,000 dinars = £25,000. A sixth idol of gold weighed 1120 lbs., and was decorated with a sapphire weighing 300 Mishkals, or 3½ lbs. There were also 100 idols of silver, each of which loaded a camel. The idols together were worth not less than £3,000,000. The Brahman temple of Kesava Deo was built on the very site where the great Buddhist monastery, Yasa Vihara, stood. Muttra was attacked by Sikandar Lodi in 1500, and great harm was done to the shrines and temples.

The Fort, rebuilt in Akbar's time, is in the centre, but only the substructure now remains. During his tolerant reign and that of his son Jahangir, Muttra again began to flourish, but the present city dates from the time of Abdun Nabi—one of Aurangzeb's Governors (1660–1668). He was killed in a local revolt, which Aurangzeb utilised as a pretext for demolish-

ing all the chief temples in the town, including the Kesava Deo temple. With the break-up of the Mughal Empire, troublous times ensued for the Muttra district. Lying, as it does, on the high roads between Delhi and Agra and Bharatpur it became the cockpit of all the fighting that took place between the Mughals, the Jats and Mahrattas during the eighteenth century in their struggles for the dominion of Northern India.

The Mutiny of 1857.—The district and city of Muttra came into the possession of the British as the result of Lord Lake's famous campaign, 1803-1805, and, with the exception of certain military operations undertaken in 1825 in regard to a disputed succession to the Bharatpur Raj, enjoyed a period of undisturbed peace up to the outbreak of the mutiny. On receipt of information of this outbreak, the ladies and non-combatants were sent off immediately to Agra, and it was proposed to send all the treasure from the Muttra treasury to that station also. The detachment of the 44th and 67th regiments of Bengal Infantry that had been sent for from Agra to escort the treasure to that place, mutinied, shot their Officer-Commanding, Lt. Burlton, and marched off towards Delhi, after setting fire to all the bungalows and offices, and releasing the prisoners in the jail. Prior to this outbreak Mr Mark Thornhill, the Magistrate of the district, had proceeded in the direction of Delhi, with Captain Nixon, who was in charge of the Bharatpur army. They had got as far as Hodal on the way to Delhi, when Mr Thornhill returned with a detachment to take measures to put down local disturbances in the Muttra district. While he was at Chhata the news of the pillage of the Muttra Treasury was brought to him by the European officers who had escaped when Lt. Burlton was shot. The party rejoined Captain

Nixon at Hodal and prepared to intercept the mutinous treasury-guard which was now approaching. The whole Bharatpur forces, however mutinied; and the Europeans with them were forced to seek safety in flight. Captain Nixon and others decided to proceed to the army before Delhi, while Mr Thornhill and his head clerk returned in the direction of Muttra, but eventually pushed on to Agra, owing to the disturbed condition of the country. After a short time Mr Thornhill returned to Muttra with a small body of volunteers and attempted to restore order, but the task proved too great for the forces at his disposal, and he and other Europeans with him were obliged eventually to return to Agra. Peace was gradually restored after the relief of Agra by Greathed in October 1857. Throughout the rebellion the great banking firm, known as the Seths of Muttra, displayed most conspicuous loyalty, and they and the Raja of Hathras received substantial rewards in the shape of confiscated villages for their assistance.

Religious Associations.—The abiding interest of Muttra lies in its religious associations. Not only the town itself, but the greater part of the district, known as Braj Mandal, commands the reverence and respect of Hindus. It is studded with places of pilgrimage, connected with the Krishna legend, and is visited throughout the year by devout crowds of pilgrims. More especially is this the case in the rainy season, when large bands of pilgrims, under the guidance of their religious leaders, perambulate the district, performing the "Banjatra," or "forest-pilgrimage," and acting the main scenes in the life of Krishna at the various localities still connected by legend with such scenes.

The chief places of pilgrimage are Muttra city itself, Brindaban, Mahaban with Gokul, Baldeo,

Gobardhan and Radha Kund, and Barsana.

Muttra City. The city is entered by the Hardinge Gate, also called the Holi Gate, built by the Municipality. The finely-carved stone-work façades of the better class of houses form one of the peculiarities of the city and are well worthy of inspection.

In the centre of the town, on an isolated site, rises the **Jami Masjid**, built by Abd-un-nabi, once covered with encaustic tiles; its court is 14 ft. above the level of the street. On either side of the façade of the gateway are Persian lines. The chronogram gives the date 1660-1661. Over the façade of the mosque proper are the 99 names of God. At the sides are two pavilions roofed in the Hindu manner. There are four minarets, which are 132 ft. high. About $\frac{1}{4}$ m. beyond is the **Katra**, which is an enclosure like that of a sarai, 804 ft. long by 653 ft. broad. Upon a terrace 30 ft. high stands a great red stone mosque, built by Aurangzeb, and used as an **Idgah**, and the most conspicuous object in a distant view of Muttra. This mosque was raised on the ruins of the Kesava Deo Temple, which was destroyed by Aurangzeb, and which, shortly before its destruction, was seen by the travellers Bernier, Tavernier, and Manucci, who describe it as a grand edifice. The foundations of the temple are plainly traceable at the back of the mosque. Excavation has proved that the Brahmanical temple of Kesava Deo was in its turn built, on the ruins of a large Buddhist monastery, which, as appears from inscriptions found here, dated back to the Kushan period, and still existed in the days of the Gupta Emperors. The earliest Buddhist inscriptions found here may be assigned to the beginning of the Christian era, and one of the latest contains

the well-known genealogy of the Gupta dynasty, down to Samudragupta (4th century A.D.). A Buddha image, extracted by General Cunningham from a well in 1862, and now preserved in the Lucknow Museum, mentions the *Yasô-vihara*, evidently a sanctuary which once existed on this site. The inscription is dated in the Gupta year 230 (A.D. 549-50).

At the back of the Katra is a modern temple to Kesava, and close by is the **Potara-Kund**, a tank in which Krishna's baby linen was washed. This tank is faced throughout with stone, and has flights of stone steps down to the water. There is also a very steep ramp for horses and cattle.

The River and Ghats.—The Jumna is about 300 yds. broad. A paved street runs the whole way along it, with bathing ghats, descending to the water, and ornamental chabutras, or platforms, and small but well-proportioned pavilions.

Visitors should make a point of seeing the *Arati* ceremony, or worship of the sacred river, which takes place about dusk at the **Visrant Ghat**, when cows, monkeys, and turtles are fed. The most convenient way of seeing the ceremony is to take a boat.

The river is full of turtles, some of them very large, which put their long necks and heads out to be fed. About 80 yds. N. of the bridge is the fine **House of the Guru Parashotamasdas**. Then comes another belonging to a Gujarati merchant, **Ballamasdas**. N. again is a slender quadrangular tower of red sandstone, 55 ft. high, known as the **Sati Burj**. The upper part is said to have been destroyed by Aurangzeb, and the plastered dome is modern. According to Mr Growse¹ it was built in 1570 A.D. to commemorate the *sati* of a wife of

¹ See *Muttra*, by F. S. Growse, 1883.

Raja Bhar Mal, of Ambèr, by her son, Bhagwan Das (p. 224). The traveller now descends several steps to the Visrant Ghat, a little N. of the Sati Burj, and so to a sort of square, where Rajas are weighed against gold. There is a small white marble arch here, close to the river. Beyond this is a ghat built by Maharaja Jai Singh, of Jaipur, and the enormous house and temple of the late Seth Lakshman Das. The observatory (p. 95) has disappeared.

Mahaban is about 6 m. S.E. of Muttra, on the left bank of the Jumna, and is reached by a good road. It is a very ancient town and place of pilgrimage, and first emerges into modern history in the year 1017 A.D., when it shared the fate of Muttra, and was sacked by Mahmud of Ghazni. The Hindu Prince is said, when the fall of the town became inevitable, to have solemnly slain his wife and children and then committed suicide. In 1234 Mahaban is mentioned as one of the gathering places of the army sent by Shamsud-din Altamsh against Kalinjar. It is also incidentally referred to by the Emperor Babar in 1526.

The surrounding country although now bare of woods, appears to have been once literally *Mahaban*, "a great forest." Even as late as 1634, the Emperor Shah Jahan held a hunt here, and killed four tigers. This ancient woodland country fringing the sacred Jumna is the scene of very early religious legends. In Sanskrit literature it is closely associated with Gokul, about a mile off, overhanging the Jumna. Indeed, the scenes of the youthful adventures of Krishna, actually shown at Mahaban, about a mile from the river, are ascribed in the Puranas to Gokul. Gokul seems to have been originally the common name for the whole, although it is now restricted to what must have been

the waterside suburb of the ancient town.

The ruins of Mahaban, which rise as a hill of brick and mud, covering about 30 acres, are on the site of the old fort. The architectural remains combine Buddhist and Hindu forms. Mahaban is celebrated as the place where in his infancy Krishna was brought by his nurse and exchanged with the newly-born daughter of Jasoda, wife of Nanda, to save him from death, at the hands of Krishna's uncle, the giant Kans. The most interesting relic at Mahaban is the so-called **Palace of Nanda**, the foster-father of the changeling Krishna. It consists of a covered court, re-erected by the Muham-madans in the time of Aurangzeb from ancient Hindu and Buddhist materials to serve as a mosque, and is divided into 4 aisles by 5 rows of 16 pillars, 80 in all, from which it takes its popular name of Assi Khamba, or the "Eighty Pillars." Many of the capitals are curiously carved with grotesque heads and squat figures. Four of them are supposed to represent by their sculptures the four ages of the world. The pillar known as the Satya Yug, or "Golden Age," is covered with rich and beautiful carving; that known as the Treta Yug, or "Second Age" of the world, is adorned with almost equal profusion. The Dwapar Yug, or "Third Age," is more scantily carved; while the Kali Yug, or present "Iron Age" of the world, is represented by a crude unsculptured pillar.

In the Palace of Nanda are laid the scenes of Krishna's infancy. His cradle, a coarse structure covered with red calico and tinsel, still stands in the pillared hall, while a blue-black image of the sacred child looks out from under a canopy against the wall. The churn in which Krishna's foster-

mother made butter for the household is shown, and consists of a long bamboo sticking out of a carved stone. A spot in the wall is pointed out as the place where the sportive milkmaids hid Krishna's flute. One pillar is said to have been polished by his foster-mother's hand, as she leant against it when churning, and others have been equally polished by the hands of generations of pilgrims. From the top of the roof there is a view over mounds of ruins, with the Jumna beyond, at intervals, amid an expanse of sand, high grasses, and rugged ravines. Mahaban is a very popular place of pilgrimage among the Hindus. Thousands of Vishnu worshippers, with yellow-stained clothes, yearly visit the scenes of the infancy of the child-god. The anniversary of Krishna's birth is celebrated during several days in the month of Bhadon (August) by a vast concourse of people.

The river-side village of Gokul, about a mile from Mahaban, where Vishnu first appeared as Krishna, has few relics of antiquity. Its shrines and temples are quite modern. It is approached, however, by a lofty and beautiful flight of steps (ghat) from the river, and for more than three centuries it has been the headquarters of the Valabhacharya sect, or Gokulastha Gusains, whose founder preached here. Many thousands of pilgrims, chiefly from Gujarat and Bombay, yearly resort to this centre of their faith, and have built numerous temples of a rather tasteless type.

Some 5 m. from Mahaban, on the same metalled road, lies another famous place of pilgrimage, Baldeo; known more familiarly as "Dauji." The town derives its celebrity from the famous temple

of Baladeva, Krishna's elder brother, which consists of the temple proper and a number of court-yards attached. Hard by the temple is a brick-built tank over 80 yds. sq., called the "Khirsagar," or "sea of milk." It is in a dilapidated condition, and the surface of the water is always covered with a thick green scum, which does not, however, deter the pilgrims either from drinking or bathing in it. Here, it is said, Gusain Gokul Nath was warned in a vision that a god lay concealed. Immediately a search was made, and the statue of Baladeva was revealed to the assembled multitudes.

16 m. to the W. of Muttra is the famous pilgrimage centre of **Gobardhan**. This town lies astride a low narrow range of hills called the "Giriraj (Girraj) Pahar," which Krishna is fabled to have held aloft on the top of his finger for seven days and seven nights to cover the people of Braj from the floods poured down upon them by Indra. The town clusters round the margin of a very large irregularly-shaped masonry tank, called the "Manasi (Mansi) Ganga," which, as the name denotes, is supposed to have been called into existence by the operation of the Divine will. Close to the Manasi Ganga is the famous temple of Harideva (Hardeo-ji) erected during the reign of Akbar by Raja Bhagwan Das of Ambër. It is an edifice 135 ft. long by 35 ft. in width, and both in plan and design is singularly like those early Romance Churches that are constantly met with in the S. of France, belonging to the 11th and 12th centuries. On the opposite side of the Manasi Ganga are two stately cenotaphs, or *chhatris*, to the memory of Ranjit Singh and Balwant Singh, Rajas of Bharatpur. In that which commemorates Ranjit Singh, who died in 1805, the exploits of the British Army under Lord Lake during the unsuccessful assaults on Bharatpur,

figure conspicuously in the paintings on the ceilings of the pavilions.

From Gobardhan a metalled road runs N. to **Radha Kund**, distant about 3 m.—another famous place of pilgrimage. On the way between the two places is another and much more magnificent cenotaph, erected in honour of Raja Suraj Mal, the founder of the present ruling family of Bharatpur, who was killed in 1763. The interior is covered with white stucco, which resembles marble; and there are a number of poor paintings, in one of which Suraj Mal is shown with several French officers round him. Behind the cenotaph is an extensive garden, and in front, and at the foot of the terrace on which the cenotaph of the Raja and his queens stand, is an artificial lake called Kusum Sarovar.

Radha Kund consists of a small town clustering round two lakes, called respectively Krishna Kund and Radha Kund, after Krishna and his favourite mistress. The lakes are faced on all sides with stone ghats and only parted from each other by a broad terrace of the same material. They present a very picturesque appearance and were constructed in 1817 at a cost of a lakh of rupees. The holiness of the place is derived from a tradition that Krishna bathed there after the pollution he had incurred in slaying the demon bull Arishta.

Some 15 m. from Gobardhan and some 5 m. from Sanket, the terminus of a branch line from Kosi, lies another famous place of pilgrimage, **Barsana**. This, according to modern Hindu belief, was the home of Krishna's favourite mistress, Radha. The town is built at the foot and on the slope of a small chain of hills. It enjoyed a brief spell of prosperity until about the middle of the 18th century when it was destroyed beyond all hopes

of restoration by the Mughal Imperial troops in one of the many combats which took place between them and the Jats of Bharatpur. The four prominent peaks of the hills are regarded as emblematic of the four-faced divinity of Brahma, and are crowned with different buildings, mostly dedicated to deities or personages prominent in the Krishna legend. The fine buildings, nearly all now in a ruinous condition, were the work of Rup Rám Katára and Mohan Ram Lavania. Conspicuous among them is the tank and pavilion, known as Bhanokhar, with pavilions supported on a series of vaulted colonnades opening on to the water.

For 3 m. before reaching Dig the road forms a sort of causeway above a very low, flat country, which was once a morass and formed the principal defence of the fort.

At Dig (or Deeg) the chief object of interest is the splendid Palace, or rather group of palaces, built by Suraj Mal of Bharatpur. Though his great design was never completed, it surpasses all the other modern palaces for grandeur of conception and beauty of detail. Fergusson (*Ind. Arch.*, 2, 179) says of it; "The glory of Dig consists in the cornices, which are generally double, a peculiarity not seen elsewhere, and which for extent of shadow and richness of detail surpass any similar ornaments in India, either in ancient or modern buildings. The lower cornice is the usual sloping entablature almost universal in such buildings. . . . The upper cornice, which was horizontal, is peculiar to Dig, and seems designed to furnish an extension of the flat roof which in Eastern Palaces is usually considered the best apartment of the house; but whether designed for this or any other purpose, it adds singularly to the richness of the effect, and by the double

shadow affords a relief and character seldom exceeded even in the East." The palace enclosure is 475 ft. by 350 ft., and has two pavilions on each side and one at each end. Several of these are figured in vol. 2, p. 82 of the *Rambles* of Sir William Sleeman. The chief pavilions are the **Gopal Bhawan** (1763), flanked by two smaller pavilions and faced by an arch for a swing and two marble thrones, which stands E. of the fine unlined Tank; the **Nand Bhawan**, N.E. of this, a fine hall, 150 ft. by 80 ft. by 20 ft.; the **Suraj Bhawan** and the **Hardeo Bhawan**, S.; and the **Kishan Bhawan**, E. again of these. The **Suraj Bhawan** is built of white marble and mosaic work; the other halls are of cream-coloured sandstone. All are highly decorated, and between them are charming gardens surrounding a small tank. Beyond and adjoining the gardens is the large **Rup Sagar Lake** and beyond it the N. gate of the fort. This has twelve bastions and a ditch 50 ft. broad. Beyond this is a natural mound, about 70 ft. high, and a building which serves as a prison. The walls are very massive and lofty. There are 72 bastions in all; and on the N.W. bastion, about 80 ft. high, is a very long cannon.

Dig is celebrated for the battle fought on the 13th November 1804, in which General Frazer defeated Jaswant Rao Holkar's army. The British took 87 pieces of ordnance in this battle, and lost in killed and wounded about 350 men. The remains of Holkar's army took shelter in the Fort of Dig. On the 1st December following Lord Lake joined the army before this place, and immediately commenced siege operations. On the night of the 23rd his troops captured an eminence which commanded the city, but not without considerable loss. The enemy then evacuated Dig on the following day and the fort on the succeeding night, and fled to Bharatpur.

6 m. from Muttra by railway is **Brindaban** (properly *Vrindaban*), meaning a forest of basil plants), the place to which Krishna removed from Gokul.

There is no reason to believe that Brindaban was ever a great seat of Buddhism. Its most ancient temples, five in number, date only from the 16th century, "while the space now occupied by a series of the largest and most magnificent shrines ever erected in Upper India was 500 years ago a belt of woodland" (Growse's *Muttra*, p. 174). The five chief temples are those of Gobind Deo-ji, Radha Ballabh, Gopi Nath, Jugal Kishor, and Madan Mohan. Brindaban is famous as the place where Krishna sported with the Gopis (milkmaids), and stole their clothes when they were bathing. The Jumna originally bounded the town to the N. and E. Of recent years the river has shifted its course, leaving the main line of ghats high and dry. Near the entrance to the town, on the left, is the large **red temple**, dating from 1590, sacred to Gobind Deo (the Divine Cowherd, *i.e.*, Krishna), now a protected monument. "It is one of the most interesting and elegant temples in India, and the only one, perhaps, from which a European architect might borrow a few hints. The temple consists of a cruciform porch, internally nearly quite perfect, though externally it is not quite clear how it was intended to be finished. The *antarala*, or inner mandap, of the original temple was afterwards apparently converted into a shrine, and is perfect internally, and used for worship, but the *sikhara* is gone, having been destroyed along with the cell, after which the *antarala* was made into a shrine. Though not large, its dimensions are respectable, the porch measuring 117 ft. E. and W. by 105 ft. N. and S., and is covered by a true vault, built with radiat

ing arches—the only instance, except one (the temple of Hardeoji at Gobardhan), known to exist in a Hindu temple in the N. of India. On each side of the original shrines are two side chapels. Over the four arms of the cross the vault is plain, and of 23½ ft. span, but in the centre it expands to 35 ft., and is quite equal in design to the best Gothic vaulting known. It is the external design of this temple, however, which is the most remarkable. The angles are accentuated with singular force and decision, and the openings, which are more than sufficient for that climate, are picturesquely arranged and pleasingly divided. It is, however, the combination of vertical with horizontal lines, covering the whole surface, that forms the great merit of the design.”¹

E. is a modern *Temple*, built by Seth Radha Krishna and Seth Gobind Das in the Dravidian style. Europeans are not allowed to enter the inner court, but above the W. gate is a terrace which commands a view. The temple consists of a vast enclosing wall, with three gopurams, which are 80 ft. to 90 ft. high, while the gates are about 55 ft. It is dedicated to Sri Ranga, a name of Vishnu; and figures of Garuda, the man-bird of Vishnu, are very conspicuous. In the great court are two white marble pavilions, one E. and W. of the tank, and a stone pavilion with a flat roof, supported by sixteen pillars, opposite the E. gopuram.

At the back of the red temple on the W. are, at two corners, two other temples which resemble each other. There is a new temple adjoining this to the W., built by a Bengali Babu. It is not tasteful, but has a finely-carved door.

The **Madan Mohan Temple** stands above a ghat on a branch

¹ Fergusson, *Ind. and East. Arch.*
2, 156

of the river. Under two fine trees, a *Ficus indica* and a *Nauclea orientalis*, is a pavilion, in which many cobras' heads are represented. Siva is said to have struck Devi with a stick here, when she jumped off this ghat, and made it a place for curing snake-bites. On the ghat is a Saligram (a species of Ammonite worshipped as a type of Vishnu), with two footprints 2½ in. long. This temple is 65 ft. high, and is in the shape of a cone. The **Temple of Gopi Nath** is thought by Mr Growse to be the earliest of the series. It was built by Raesil Ji, who distinguished himself under Akbar. It resembles that of Madan Mohan, but is in a ruinous condition. Its special feature is an arcade of three bracket arches. The **Temple of Jugal Kishor** is at the lower end of the town, near the Kesi Ghat. It is said to have been built by Neo-Karan, a Chauhan Chief, in 1627 A.D. The choir has pierced tracery in the head of the arch, and above it a representation of Krishna supporting the Hill of Gobardhan. The **Temple of Radha Ballabh**, of which the shrine was demolished by Aurangzeb, is a picturesque ruin.

The metre-gauge line of the B.B.C.I. Ry. from Agra Fort runs past Achnera Jn. (17 m.) to Muttra Jn. and Muttra Cant. (40 m.), and thence past Hathras City (pop. 38,763), 47 m. from Achnera to (65 m.) **Hathras Road** stn., junction with the E.I. Ry. (p. 437), Kasganj (104 m.), junction with the R.K. Ry. to Bareilly (p. 425), Farukhabad (171 m.) junction with E.I. Ry. to Shikohabad (p. 437), Fatehgarh (175 m.) and (259 m.) **Cawnpore** (Route 21).

From Muttra Jn. to Delhi Main Station (89 m.) the line forms part of the broad-gauge system of the G.I.P. Ry. from Bombay

via Itarsi, Bhopal, Bina, Jhansi, Gwalior and Agra Cantonment.

Starting from Agra Cant. the line runs through—

868 m. from Bombay, Muttra Jn.

894 m. **Kosi Kalan** branch to Sanket (p. 262) for Barsana.

920 m. **Palwal**, the second largest town in the Gurgaon District, 37 m. S. of Delhi. Its origin seems to be lost sight of, but the Pandits seem to identify it as the *Apelava* of the *Mahabharata*, part of the Pandava kingdom of Indraprastha, and tradition associates with the same period the high mound of the old site of Aharwan, a village a few miles to the S.W. It is said to have lain in a state of decay for a long period, and then to have been restored by Vikramaditya some 1900 years ago. The oldest part covers a high mound formed by accumulated debris of many centuries, but of late years habitation and streets have taken up part of the plain below. During the Mughal times it was without a history, but on the downfall of the Empire it was given with surrounding territory in *jagir* to General De Boigne, and, after the conquest by Lord Lake, to Murtaza Khan of Delhi for a few years, after which it came under direct British rule. The town carries on considerable trade, especially in cotton, and has a R.H. about 3 furlongs from the railway station.

934 m. **Ballabgarh**, 20 m. S. of Delhi on the Muttra road: built on symmetrical chess-board lines. The old Raja's palace is picturesque. Permission to occupy the R.Hs. in Gurgaon Dt. must be obtained from the District Board, Gurgaon.

945 m. **Tughlakabad**; on the outskirts of New Delhi. The line

passes through the ruins of old places S. of Delhi (p. 314), the Kutb Minar, 7 m. to the W., being at first in full sight.

952 m. **Hazrat Nizam-ud-din**.

956 m. **New Delhi** (p. 322).

957 m. **DELHI** Main stn. From Delhi the "Frontier Mail" of the B.B.C.I. Ry. runs over the N.W. Ry. to Lahore (Route 15, p. 351) and Peshawar (Route 17).

ROUTE 13.

AGRA AND FATEHPUR-SIKRI.

AGRA ★ There are several railway stations at Agra, but visitors need concern themselves only with two. If they come in from Tundla by the E.I. Ry. (Route 21) from the E., or by the B.B. and C.I. Ry. from the W. (metre-gauge from Bharatpur and Bandikui; broad-gauge from Bayana; Route 12), they will alight at the **Fort Station**, just outside the Delhi Gate of the Fort. The **Cantonment Station**, lying W. of the Cantonment, is on the G.I.P. Railway main line from Bombay to Delhi (Route 9). Conveyances will be found at both stations. There are two fine bridges across the river Jumna, which carry both the railway track and vehicular and foot traffic; the Strachey Bridge and the Jumna Bridge. The latter takes the E.I. Ry. line to the Fort station; the former goes to the City station; this is the route followed by the E.I.R. Howrah-Delhi express which connects with the G.I.P. Ry. main line just beyond Agra City stn.

Agra is the headquarters of a

Division and a District; and a British infantry battalion and an Indian infantry regiment are stationed here as well as a battery of artillery in the Fort. In size and importance it is the third in the United Provinces, and has a population of 185,532 (163,750 in the Municipality, 21,782 in the Cantonment). It stands on the right bank of the Jumna, in lat. $27^{\circ} 10'$ and long. $78^{\circ} 5'$, and is 534 ft. above sea-level. It is 790 m. distant from Calcutta by rail, 835 m. from Bombay by G.I.P. Railway, 122 m. from Delhi, and 779 m. from Peshawar. Roads from Agra lead to (1) Gwalior, 77 m., and Jhansi, 136 m.; (2) Bharatpur, 33 m.; (3) Muttra, 36 m., and Delhi, 125 m.; (4) Aligarh, 50 m.; (5) Mainpuri, 68 m. Pestonji's garage and petrol store is near the Post Office. Petrol and motor requisites can also be obtained from the Popular Cycle and Motor Company in Taj Road, Nathmal Mahadeo, in Belanganj and S. H. Paharsari & Sons, opposite Metropole H.

Though a week might be spent very pleasantly in visiting the sights in and around Agra,¹ they can be seen in shorter time, and for those persons who have not so many days at their disposal the following itinerary may be of service :—

1st Day, Morning.—Fort and Palace. **Afternoon.**—Drive to the Jami Masjid and on to the Taj.

2nd Day, Morning.—Drive to Sikandra. **Afternoon.**—To Itimad-ud-daula, and Chini ka rauza, on the left bank of the Jumna.

Most people will wish to visit some of these places more than once. A full day, or, better still, 24 hours should be devoted to the excursion to Fatehpur-Sikri (23 m.).

The modern city comprises the

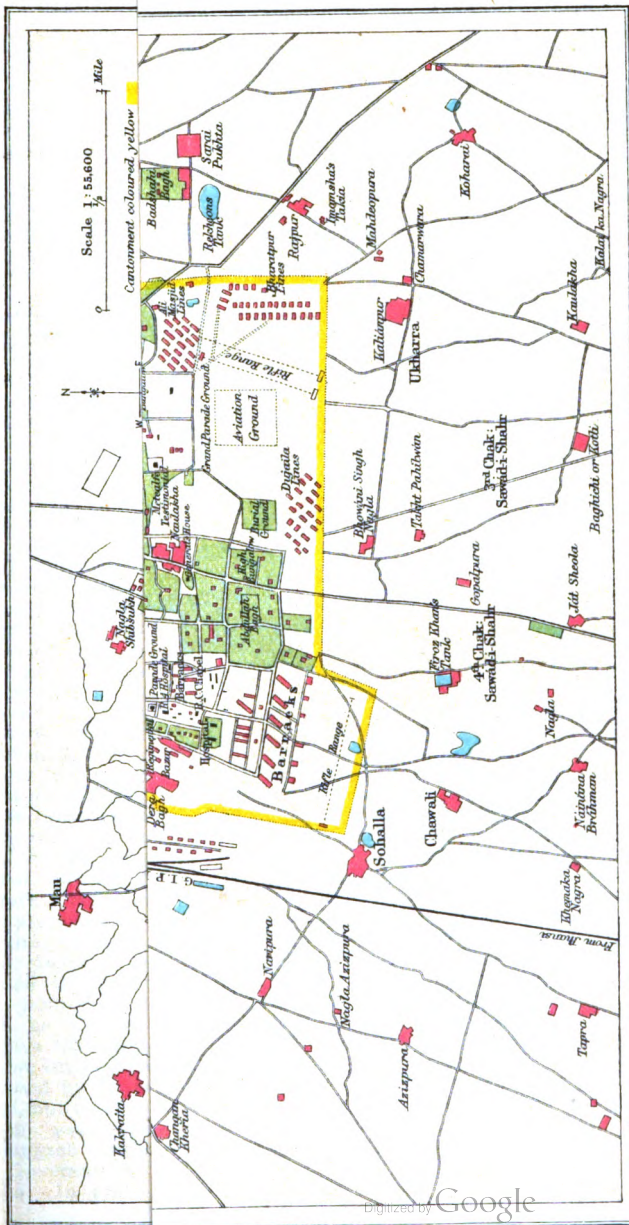
Cantonment on the S., the Civil Station on the N.W., and the Fort on the N.E., with the Indian city resting in the centre of the triangle. The Jumna flows past the city in a direction from N. to S., but opposite the fort it turns on a great elbow, and in consequence the Taj is nearly due E. of the S. end of the fort. It is desirable to visit the Agra Fort before Delhi, as otherwise it is difficult to understand the exact relation of the more isolated buildings of the Delhi palace.

The hotels are situated at the S. of the Indian city in and about the angle where the Cantonment boundary narrows on the W. Near them are the Post Office, banks, and club, the last at the W. end of the Mall, a very fine broad avenue, lighted by electricity, which leads E. to the Taj Road and the MacDonnell Park, laid out between the Taj and the fort, and enclosing at its N. end the memorial statue of Queen Victoria. S. of the telegraph office are fine public gardens. N. of the hotels, and on the W. of the city, situated on the Drummond Road, are the District Courts, the Agra and St John's Colleges, and beyond the latter the Central Jail. To the E. of this, and on the N. of the city, are the R.C. Cathedral, College, and Convent, and 1 m. to the N. are the Court of the District Judge and the R.C. Cemetery. The road to Sikandra, which is the main road to Muttra, runs N.W. from Agra, passing near the District Jail. A little S. by W., running through the suburb of Shahganj, is the road to Fatehpur-Sikri, which no one should miss; the buildings of the Emperor Akbar's Palace are unique, and afford one of the most interesting sights in all India.

The old City covered about 11 sq. m., half of which area is still inhabited. It is clean, and has a fine bazar. The chief Articles of Local Manufacture are

¹ *Agra and the Neighbourhood*, by H. G. Keene (Thacker); *Three Days at Agra*, by H. A. Newell; *Agra and the Taj*, by F. B. Havell (Longmans, 1912).

AGRA AND ENVIRONS



John Bartholomew & Son, Ltd. Edinburgh

London. John Murray, Albemarle Street.

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gold and silver embroidery, carving in soapstone, and imitation of the old inlay work (*pietra dura*) on white marble. Agra is also famous for its carpets. There is a flourishing boot and shoe industry.

History.— Nothing definite is known of Agra before the Muhammadan period. Sikandar Lodi took it from the rebellious Muhammadan Governor of Bayana, and made it his capital in 1501. Sikandar Lodi died at Agra in 1515 A.D., but was buried at Delhi; he built the Baradari Palace, near Sikandra, which suburb received its name from him. Babar is said to have had a garden-palace on the E. bank of the Jumna, nearly opposite the Taj, and there is a mosque near the spot, with an inscription, which shows that it was built by Babar's son, Humayun, in 1530 A.D.

The Emperor Akbar resided at Agra in the early years of his reign. His capital was at Fatehpur-Sikri from about 1570 to 1585. After a period at Lahore, he returned to Agra in 1599, where he died in 1605. The only buildings that can now be attributed to him with certainty are the walls and the red sandstone buildings in the S.E. corner of the fort. Jahangir left Agra in 1618, and never returned. Shah Jahan resided at Agra from 1632 to 1637, and re-named the city Akbarabad after his grandfather, but the new title did not endure. He built much of the fort and constructed the principal buildings of the palace and the Taj. Between 1638 and 1650 he caused the palace at Delhi and the Jami Masjid to be erected, and he doubtless intended to remove the Capital to that place. Before this was finally done he was deposed by his son Aurangzeb in 1658, but lived as a State prisoner seven years longer at Agra. Aurangzeb removed the seat of Government permanently to Delhi. In 1764 Agra was taken

by Suraj Mal of Bharatpur, and Samru, with an army of Jats, who did much damage to the town. In 1770 the Mahrattas captured it from the Jats, who recovered it but were themselves expelled by Najaf Khan in 1774. In 1784, when Muhammad Beg was Governor, Agra was besieged and taken by Mahdaji Scindia and the Mahrattas held it till it was captured by Lord Lake, 17th October 1803, Colonel Hessian, who commanded, surrendering after a brief bombardment. The seat of government of the N.W. Provinces was at Agra from 1835 until 1859, when it was transferred to Allahabad. Since 1902 the N.W. Provinces and Oudh (which were placed under one Lieutenant-Governor in 1877) have been known as the United Provinces of Agra and Oudh.

When the Mutiny broke out at Meerut on 10th and Delhi on 11th May 1857, there were in Agra one British Regiment and some British Artillery, and two Bengal Regiments, the 44th and 67th. The fort was at once secured by the Europeans, and after the two companies of the N.I., which had been sent to Muttra to bring the treasure there into Agra, mutinied and marched off to Delhi, their comrades in Agra were ordered to pile their arms on 31st May, and did so. The detachment of the Kotah Contingent, which had been despatched to Agra in consequence of the mutinies at Nasirabad and Nimach, went off on 4th July to join the Nimach mutineers, consisting of a strong brigade of all arms at Sassia, 2 m. from Agra. On 5th July Brigadier Polwhele moved out with 816 men to attack them. The battle began with artillery, but the enemy were so well posted, sheltered by low trees and walls and natural earthworks, that the British guns were able to do them but little damage. At 4 P.M. the British ammunition was expended; Colonel Riddell advanced with the English soldiers,

and captured the village of Shah-ganj, but with such heavy loss that they were unable to hold their ground, and were obliged to retreat into the Fort of Agra.¹ The rebels burnt the Cantonments, murdered all Europeans who were found outside the fort, and then marched to Delhi.

There were now 6000 men, women, and children, including 1500 Indians, in the fort, which was put in a thorough state of defence, Colonel Cotton assuming command. On the 20th of August he sent out Major Montgomery with a small column, which on the 24th defeated the rebels at Aligarh, and took that place. On the 9th September Mr Colvin, Lieut.-Governor of the N.W. Provinces, died. When Delhi was captured by the British in September the Nasirabad Brigade, with other mutinous regiments, advanced, on 6th October, upon Agra. At this very time Colonel Greathed's force from Delhi arrived without their knowledge. The rebels were completely routed at the Kari Nadi on 10th October, and Agra was finally relieved from all danger.

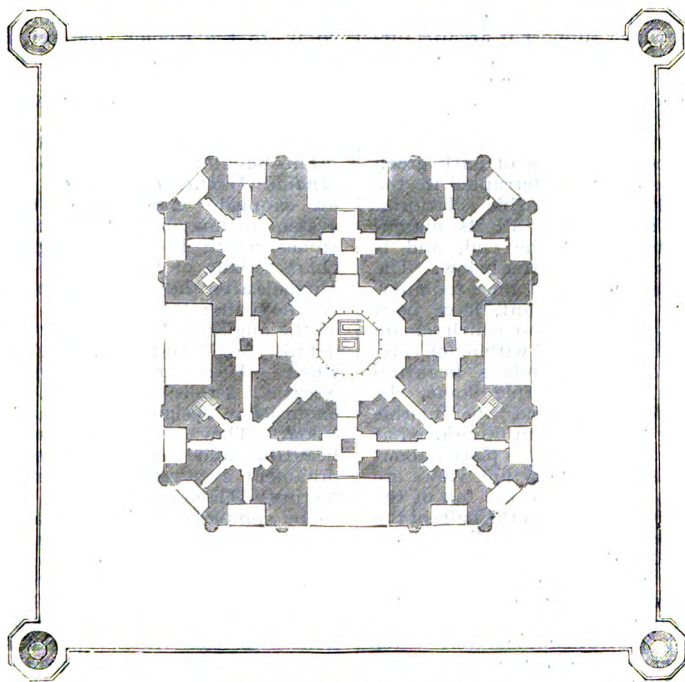
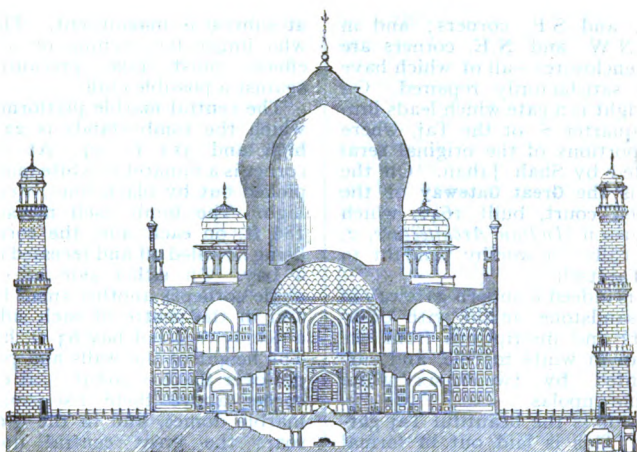
The Taj Mahal should be seen repeatedly. The best time for a first visit is late in the afternoon. It was commenced in 1640 A.H., or 1630 A.D., by the Emperor Shah Jahan, as a tomb for his favourite queen, Arjmand Banu, entitled Mumtaz-i-Mahal, the "Elect of the Palace," whence the name Taj Mahal is derived. She was the daughter of Asaf Khan, brother of Nurjahan, the famous empress-wife of Jahangir. Their father was Mirza Ghiyas Beg, a Persian, who came from Teheran to seek his

fortune in India, and rose to power under the title of Itimad-ud-daula (see p. 279). Mumtaz-i-Mahal married Shah Jahan in 1615 A.D., had by him fourteen children, and died in child-bed of the last in 1629, at Burhanpur, in the Deccan (p. 44). Her body was brought to Agra, and laid in the garden where the Taj stands until the mausoleum was built. The Taj cost, according to some accounts, Rs.18,465,186, and according to others, Rs.31,748,026. It took upwards of twenty-two years to build, according to Tavernier, who records that he saw both its commencement and completion, and that the scaffolding used was constructed of brick. There were originally two silver doors at the entrance, but these were taken away and melted by Suraj Mal and his Jats. Austin of Bordeaux, a silversmith in the Emperor's service, probably took part in the decoration, especially in the metal work of the doors and golden screen which originally enclosed the cenotaph.¹

Before reaching the Taj the State Circuit House, with its fine grounds, which merge into the MacDonnell Park, will be seen on the left of the road. The surroundings outside the Taj enclosure have been well restored of recent years, and both the tomb and the Fatehpuri mosque of red sandstone flanking the approach from the fort now form extremely picturesque features in the scene. The approach to the Taj is by the *Taj Ganj Gate*, which opens into an outer court 880 ft. long and 440 ft. wide. Inside the court are two tombs raised on an upper storey in the

¹ A vivid picture of the state of affairs in Agra during this period is given in Mr M. Thornhill's *Personal Adventures and Experiences of a Magistrate in the Indian Mutiny*. See also Lord Roberts' *Forty-one Years in India*.

¹ According to Fray Sebastian Manrique of the Society of Jesus, who visited Agra in 1640, the designer of the Taj was a Venetian jeweller of the name of Geronimo Veroneo, who died at Lahore in that year and is buried in the old R.C. cemetery at Agra. The ultimate authority for the statement is Father Josef da Castro, another Jesuit, who was Veroneo's executor, and died at Agra in 1646. Mr Havell, however, discredits the story (*XVth Century*, June 1903).



Section and Plan of the Taj Mahal,

S.W. and S.E. corners; and in the N.W. and N.E. corners are two enclosures—all of which have been satisfactorily repaired. On the right is a gate which leads into the quarter S. of the Taj, where are portions of the original serai erected by Shah Jahan. On the left is the Great Gateway of the garden-court, built 1648, which Fergusson (*Indian Architecture*, 2, 313) calls "a worthy pendant to the Taj itself."

It is indeed a superb gateway of red sandstone, inlaid with ornaments and inscriptions from the Koran in white marble, and surmounted by twenty-six white marble cupolas.

Inside is the beautiful Taj garden. This is laid out in formal style, the whole to the S. of the platform of the Taj and the buildings which support it architecturally being divided by two main causeways into four portions, which are again subdivided into four. The principal vista is along a red sandstone watercourse, set between dual rows of dark green cypresses and interrupted in the middle by a marble platform. The Taj rises in all its matchless beauty at the end, and is mirrored in the water below. The trees of the garden, once too numerous and luxuriant, have been wisely thinned, those which remain have been selected with much care, and admit of endless beautiful views of the marble dome, the marble walls, and the marble minarets, which can be enjoyed at leisure from the seats placed about the gardens. Very fine views are also obtained from the top of the great gate and from the halls in the centre of the side walls. Along the S. wall on either side of the great gate is an extremely fine pillared gallery of red sandstone. The beauty of the Taj is perhaps most perfect immediately after sunset, or under the moonlight; but every change of light seems to lend new graces to it, and the view

at sunrise is magnificent. Those who linger for evening or night effects must take precautions against a possible chill.

The central marble platform on which the tomb stands is 22 ft. high and 313 ft. sq. At each corner is a minaret of white marble picked out by black lines, 137 ft. high. The tomb itself measures 186 ft. on each side, the corners being bevelled off and recessed into a bay. On either side of each angle corner is another small bay, and in the centre of each side is a deeply recessed bay 63 ft. high. The height of the walls and parapet over them is 108 ft.; at each corner above them rise smaller marble domes, and in the centre soars the great central dome, which rises to a height of 187 ft., the metal pinnacle adding another 30 ft. to the whole; the height of the top of the dome above the level of the garden is just 25 ft. less than that of the Kutb Minar, and of the top of the pinnacle a few ft. higher than that. "This building," writes Fergusson (*Indian Architecture*, 2, 316), "is an exquisite example of that system of inlaying with precious stones which became the great characteristic of the style of the Mughals after the death of Akbar." All the spandrels of the Taj, as well as the angles and more important details, are inlaid with precious stones. These are combined in wreaths, scrolls, and frets, as exquisite in design as beautiful in colour. They form the most beautiful and precious style of ornament ever adopted in architecture. Though, of course, not to be compared with the beauty of Greek ornament, it certainly stands first among the purely decorative forms of architectural design. The judgment with which this style of ornament is apportioned to the various parts is almost as remarkable as the ornament itself, and conveys a high idea of the taste and skill

of the Indian architects of the age.

The delicately-sculptured ornamentation, in low relief, to be found on all exterior walls and the recesses of the building, is in its way as beautiful as the *pietra dura* work itself.

In the centre of the tomb is an octagonal chamber surrounded by a series of other rooms. Each side of the central room measures 24 ft. The dome rises 80 ft. above the pavement, and is 58 ft. in diameter. Under the centre of the dome, enclosed by a trellis-work screen of white marble, which Fergusson (*Indian Architecture*, 2, 316), considers "a *chef-d'œuvre* of elegance in Indian art," but which most people will rate less highly—it probably dates from the reign of Aurangzeb—are the tombs of Mumtaz-i-Mahal and Shah Jahan; the simple inlay work on these and the more elaborate work on the screen deserve special examination. "These, however, as is usual in Indian sepulchres, are not the true tombs—the bodies rest in a vault, level with the surface of the ground, beneath plainer tombstones, placed exactly below those in the hall above." Over the two tombs hangs a fine Cairene lamp, the graceful gift of Lord Curzon. The inscriptions on them are "The resplendent grave of Arjmand Banu Begam, called Mumtaz-i-Mahal, died in 1040 A.H." (1631 A.D.); and "The illustrious sepulchre of His Most Exalted Majesty, dignified as Razwan (the guardian of Paradise) having his abode in Paradise and his dwelling in the starry heaven, inhabitant of the region of bliss, the second lord of the Kiran (the conjunction of Jupiter and Venus, during which he was born), Shah Jahan the King valiant. He travelled from this transitory world to the world of eternity on the night of the 28th of the month of Rajab 1076 A.H." (1666 A.D.). The Queen's Tomb

bears the 99 names of God. "The light to the central apartment," says Fergusson, "is admitted only through double screens of white marble trellis-work of the most exquisite design, one on the outer and one on the inner face of the walls. In our climate this would produce nearly complete darkness; but in India, and in a building wholly composed of white marble, this was required to temper the glare that otherwise would have been intolerable. As it is, no words can express the chastened beauty of that central chamber, seen in the soft gloom of the subdued light that reaches it through the distant and half-closed openings that surround it.¹ When used as a Baradari, or pleasure-palace,² it must always have been the coolest and loveliest of garden retreats, and now that it is sacred to the dead it is the most graceful and the most impressive of sepulchres in the world." There is a most wonderful echo in the dome.

The mausoleum and its surroundings now receive far more loving care than would ever have been the case under a Muhammadan Emperor. For the excellent work done in this connection at Agra and at Fatehpur-Sikri and Sikandra of late years the public have to thank, in the first place, Sir John Strachey, and next, Sir Antony (Lord) MacDonnell, and his able assistant, the late Mr E. W. Smith; and, lastly, Lord Curzon, who not only laid down an elaborate programme of restoration but supervised the execution of every detail during his Vice-royalty.

On a lower level at either side of the mausoleum are two fine buildings of red sandstone, a mosque on the W., and an assembly hall, its *jawab* (answer) or complement on

¹ The light in the interior is hardly sufficient since the marble grilles have been fitted with glass.

² It is not probable that the Taj was ever used as a pleasure-house.

the E. On the pavement in front of the latter, which bears the unusual decoration of flowers, is a representation of the finial of the Taj. The Taj was intended to be seen balanced between these two buildings, and every one should cross the river by the ferry-boat, which will be found at the end of the road which runs outside the W. wall from the entrance to the outer court, in order to realise this beautiful view. The immense construction on the W. will be remarked, resembling a well, with a well-run by which water was once raised from the river to supply the fountains. From the farther side various paths lead to the E. end of the Jumna Bridge, if it is desired to return by that route.

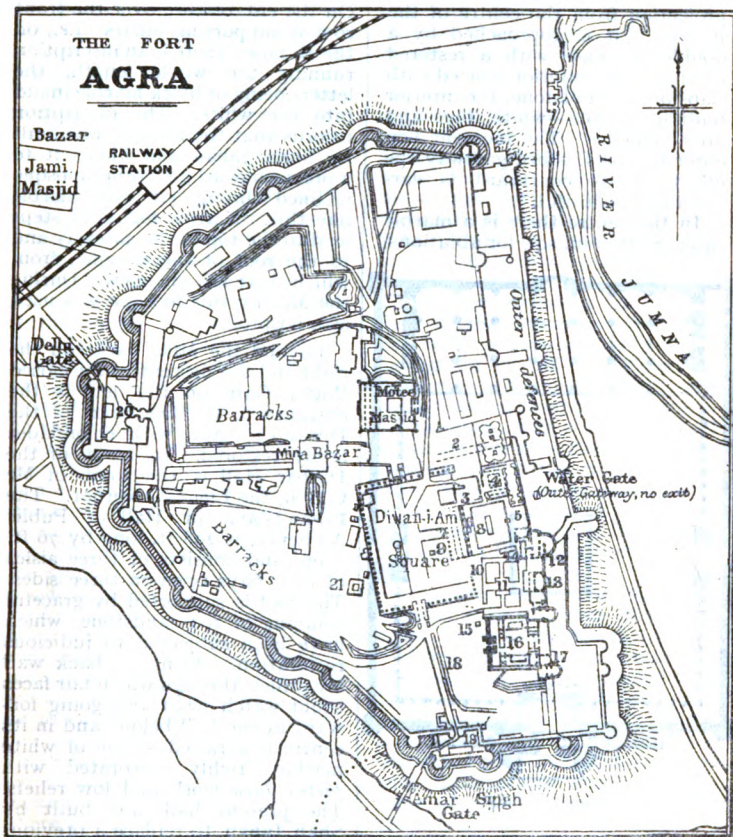
The Fort.—Most of the magnificent Mughal buildings which render Agra so interesting in the eye of the traveller are situated within the fort, which has a circuit of over a mile. A pass is required, obtainable from the station staff officer, at 2 annas for each visitor. The walls and flanking defences are of red sandstone, and present an imposing appearance, being nearly 70 ft. high; the finest portion of them is along the N. side and to the S. of the N.E. bastion. The ditch is 30 ft. wide and 35 ft. deep. The Water Gate on the E. is closed, but there are still two entrances—the Amar Singh Gate on the S., the Delhi Gate on the W. Outside the latter, and connecting it with the Jami Masjid, was the fine Tripulia court, removed after 1857; in it was the Nakkar Khana, music gallery. Crossing the drawbridge to the Delhi Gate, and passing the outer and inner archways, the latter with a date of 1600 A.D., a somewhat steep slope between red sandstone walls will be found to lead to another gateway called the *Hathi Pol*, or "Elephant Gate." Two stone elephants with riders, which

formerly stood on platforms on either side of the Gate, were thrown down by order of Aurangzeb. According to William Finch, who visited Agra in the reign of Jahangir (1610), the riders represented two Rajput brothers, slain "by multitudes oppressing" for refusing to surrender their nephew. The marks where the feet of the elephants were fixed can still be traced on the platforms.¹ The archway is flanked by two octagonal towers of red sandstone, relieved with designs in white marble. The domed interior of the gateway, with a raised platform for the guard on either side, is very striking. The inner elevation is curiously reminiscent of the early Florentine palaces.

Inside the gate one broad road sweeps to the left, and, passing the magazine, turns to the front of the Moti Masjid and the N. gate of the court in front of the Diwan-i-'Am, while another, passing to the right as far as the head of the descent to the Amar Singh Gate, then turns to the S. gate of that court. A short way down the latter on the left a road, not always open, leads to the Mina bazar, between the mosque and court.

The Moti Masjid, the "Pearl Mosque," is described by Fergusson (*Indian Architecture*, 2, 317), as "one of the purest and most elegant buildings of its class to be found anywhere." He gives 1646-53 as the date of its erection: it is said to have cost Rs.300,000. It was built by Shah Jahan on ground sloping from W. to E., and the fine entrance gateway of

¹ It has been supposed that these statues were removed by Shah Jahan to Delhi when he built his new palace there. But Mr Havell (*Agra and the Taj*, p. 41) has pointed out that the marks on the platforms at Agra do not correspond with the dimensions of the elephant which was found at Delhi. The statues, without riders, which now stand at the Delhi Gate of the Delhi Fort are modern (p. 302). Figures of elephants were commonly placed in front of palaces and fortresses.

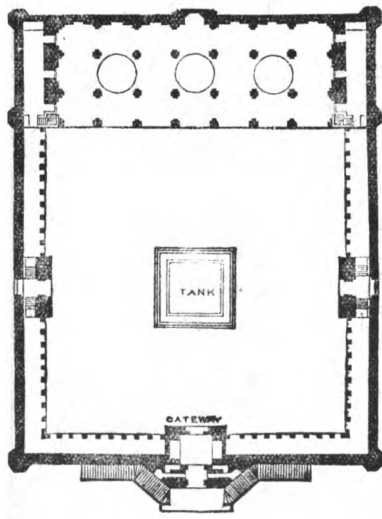


Stanford's Geog. Estab.

1. Northern Tower.
2. Descent to Water Gate.
3. Nagina Masjid and ladies' private Bazar.
4. Small Courts and ruins of Baths.
5. Open Terrace with Diwan-i-Khas on S. side.
6. Recess where the Emperor's Throne stood.
7. Diwan-i-Am (Hall of Public Audience).
8. Machchi Bhawan.
9. Mr Colvin's Grave.
10. Mina Mosque.
11. The Anguri Bagh (Grape Garden).
12. Saman Burj (Octagon Tower). At N. angle is an outlet by secret passage.
13. Khas Mahal.
14. Shish Mahal (Mirror Palace).
15. Well.
16. Palace of Jahangir (or Akbar).
17. Tower. At the base is an entrance to a secret passage.
18. Incline from Amar Singh's Gate.
19. Court of Amar Singh's Gate.
20. Elephant Gate.
21. Kiosk of Salimgarh.

red sandstone makes a trihedral projection from the centre of the E. face; it is approached by a double staircase with a restored railing. The exterior is faced with slabs of red sandstone, the interior built of marble—white, blue and grey veined. "The moment you enter by the Eastern gateway the effect of its courtyard is surpassingly beautiful."

In the centre there is a marble tank, 37 ft. 7 in. sq., for ablutions,



Moti Masjid.

and between it and the S.E. inner corner of the mosque there stands an ancient sundial, consisting of an octagonal marble pillar, 4 ft. high, with no gnomon, but simply two crossed lines and an arc. A marble cloister runs round the E., N., and S. sides of the court, which measures 234 ft. and 183 ft., interrupted by archways, of which those in the N. and S. sides are closed. The mosque proper, measures 149 ft. by 56 ft., and consists of three aisles of seven bays opening on to the courtyard,

and surmounted by three domes. On the entablature over the front row of supporting pillars—*i.e.*, on the E. face—there is an inscription running the whole length, the letters being of black marble inlaid into the white. The inscription records that the mosque was built by Shah Jahan and likens it to a precious pearl; no other mosque is lined throughout with marble like this. Narrow flights of steps lead to the top of the gateway and to the roof of the mosque, from which there is a fine view. During the Mutiny this mosque was used as a hospital.

Beyond the Mina bazar on the right and the descent to the closed Water Gate on the left is the entrance to the fine court of the Diwan-i-'Am, with colonnades lately restored. In front of the Darbar Hall is the tomb of Mr Colvin, the Lieut.-Governor. The Diwan-i-'Am, or Hall of Public Audience, is 208 ft. long by 76 ft. deep, and consists of three aisles of nine bays open on three sides. The roof is supported by graceful columns of red sandstone, which have been subjected to judicious restoration. Along its back wall are grilles, through which fair faces could watch what was going forward in the hall below, and in its centre is a raised alcove of white marble, richly decorated with *pietra dura* work and low reliefs. The present hall was built by Shah Jahan, to replace a previous wooden structure.

The entrance to the inner courts of the Palace from this side is by a passage and steps to the N. of the Diwan-i-'Am; it was probably on the site of these courts that William Hawkins was received by the Emperor Jahangir in 1609.¹

¹ "Perceiving I had the Turkish tongue, which himselfe well understood, hee commanded me to follow him into his chamber of presence (*diwan-i-khas*), being then risen from that place of open audience" (*diwan-i-am*). See the account as reproduced in Sir William Foster's *Early Travels in India*. (Clarendon Press, 1921, p. 81).

The first enclosure entered is the **Machchi Bhawan**, or "Fish Square," which formerly possessed a large tank. A two-storeyed cloister runs all round it, except on the side which fronts the Jumna, where the upper storey gives place to an open terrace. In the N. side are two very fine bronze gates taken by Akbar from Chitorgarh (p. 155), and at the N.W. corner is a beautiful little three-domed mosque of white marble, called the **Nagina Masjid**, or "Gem Mosque." This was the private mosque of the royal ladies of the court, and was built by Shah Jahan. Beneath, in a small courtyard, was a bazar where merchants used to display their goods to the ladies of the court. On the terrace on the river-side is a black throne with a white seat opposite it. The former has a long fissure, which is said to have appeared when the throne was usurped by the Jat Chief of Bharatpur. There is a reddish stain in one spot, which is alleged to be blood. An inscription runs round the four sides, stating that "when Salim became heir to the crown his name was changed to Jahangir, and for the light of his justice he was called Nur-ud-din. His sword cut his enemies' heads into two halves like the Gemini." The date given is 1011 A.H.=1603 A.D. Beneath this terrace is a wide enclosure within the outer walls, where contests between elephants and tigers formerly took place. On the N. of the terrace is the site of a hall of inlaid marble and of various rooms of the Bath, or **Hammam**, now in a ruinous condition; and on the S. is the **Diwan-i-Khas**, or Hall of Private Audience. The hall, which consists of an open colonnade in front and an enclosed room at the back, measures 65 ft. by 34 ft. by 22 ft. high, and is a miracle of beauty. The carving is exquisite, and the flowers inlaid on the white marble with red

cornelian and other valuable stones are introduced with better, because more sparing, effect than in the **Diwan-i-Khas** of Delhi. The date of the building is 1046 A.H.=1637 A.D. It is contained in the title Sa'adat Sarai wa Humayun Asas, the Abode of Joy and Auspicious Home. A staircase leads from the **Diwan-i-Khas** to the **Saman Burj**, a few steps on the right conducting to the tiny **Mina Masjid**, or private mosque of the Emperor, probably the smallest mosque in existence. The proper name of the **Saman Burj** is **Musamman**, or Octagon, but it is generally known by a corruption of its name as the **Jessamine (Yâsmin) Burj**; the chief Sultana lived in the beautiful pavilion, with a fountain and retiring-room over the river. The lovely marble lattice-work seems to have been broken by cannon-shot in some places. Part of the marble pavement in front of it is made to represent a **Pachisi** board.¹

Opposite the **Saman Burj**, but usually entered from the next court, is the **Shish Mahal**, literally "Mirror Palace." It consists of two dark chambers furnished with fountains and an artificial cascade arranged to fall over lighted lamps. The walls and ceilings are decorated with pounded talc and with innumerable small mirrors, some of which were restored in 1875.

Above the buildings at this spot, and approached by steps above the **Mina Masjid**, are the remains of reservoirs and water-ducts and arrangements for the raising of water from below. From the roof a fine view is also obtained of the courts, on either side of it, of the

¹ The game of *Pachisi* is not in the least like chess, to which it is often compared. It is played by four players, who each have four pieces. The moves are regulated, as in backgammon, by the throwing of dice. The board consists of four rectangles, of which each is made up of three rows of eight squares.

Moti Masjid and the Taj. Of the latter many fine views are obtained along the river from the terrace of the Machchi Bhawan to the Palace of Akbar.

The **Anguri Bagh** or "Grape Garden," now entered, is a fine square of 280 ft., now planted with grass. In the centre of the E. side is a lovely hall called the **Khas Mahal**, the gilding and colouring of which were in part restored in 1875. In front are small tanks and fountains. The **Khas Mahal** undoubtedly formed the model upon which the **Diwan-i-Khas** at Delhi was built; it measures 70 ft. by 40 ft. In the platform under it are subterranean apartments for use in the summer heats, from which passages continue behind the fort wall, along this Eastern front. On either hand, also facing the river, are the **Golden Pavilions**, so called from their curved roofs being covered with gilded plates of copper. In them are bedrooms for ladies, with holes in the wall 14 in. deep, into which they used to slip their jewels. These holes are so narrow that only a woman's arm could draw out the contents. In the S.E. corner of the **Anguri Bagh** will be found three rooms, beautifully decorated in fresco, which were the private apartments of **Shah Jahan**. The room nearest the river is an octagonal pavilion and very beautiful. In it, according to tradition, **Shah Jahan** died in 1666, gazing upon the **Taj**. To the W. of the rooms is another in which stand the so-called **Gates of Somnath** (p. 248), 12 ft. high and finely carved; they are of deodar, not sandal, wood, and of a later and corrupt, though well recognised, **Muhammadan** design. There is a Kufic inscription running round them, in which the name of **Sabuktagin** has been read. They were captured by General **Nott** at **Ghazni**, and brought here in 1842.

The **Jahangiri Mahal**, a beautiful red sandstone palace, is now entered. It was built either by **Jahangir** or **Akbar**, probably the latter, and stands in the S.E. part of the fort, between the palace of **Shah Jahan** and the **Bangali** bastion. The principal façade on the E. is decorated with bright tiles in the upper portion, and is pierced in the centre by a fine entrance gateway. This leads through a vestibule into a fine domed hall, 18 ft. sq., the ceiling of which is elaborately carved, and from which a corridor leads into the grand central court, which is 72 ft. sq. The general atmosphere and design of this court is predominantly Hindu, but the minute and exquisite surface carving is definitely Saracenic.

"On the N. side of the court is a grand open pillared hall, 62 ft. long and 37 ft. broad. The pillars support bracket capitals richly carved and ornamented with pendants. The front brackets support broad sloping eaves of thin stone slabs. But the stone roof or ceiling of this pillared hall is the most remarkable feature about it. It is supported most curiously by stone cross-beams, which are ornamented with the quaint device of a great serpent or dragon carved on them lengthways. A covered passage or corridor runs round the top of this hall, from which one can look down into it. The other pillared hall on the opposite or S. side of the grand court is somewhat less in size."

From the grand court a large chamber to the E. leads to a recessed portico in the centre of a quadrangle which faces the river, supported by two lofty pillars and two half pillars of the more slender and graceful Saracenic kind. Some of the chambers are lined with stucco, which has been painted, and has lasted better than the stonework. The palace ends on the side facing the river, with a screen wall and two corner

bastions, each surmounted by an ornamental tower with a domed cupola. There are many vaulted chambers underneath the palace, used as places of retreat during the summer heats. A few years ago the palace was most successfully restored, a process rendered necessary by the bad quality of the red sandstone originally used.

The Akbari Mahal lies to the S. of the so-called Jahangiri Mahal. The Eastern rooms were formerly used as a military prison, but they have now been opened up by the Archæological Department. From them an excellent view of the Taj and river is obtainable. The principal feature of these buildings was the large central courtyard, some 140 ft. square. The Western façade of the building stretched Southwards to a point near the S. outer wall of the fort, terminating in a *burj*, or tower, probably similar in design to the Southern *burj* of the Jahangiri Mahal. The whole of this façade has, unfortunately, disappeared, with the exception of a small portion near the Southern *burj* of the Jahangiri Mahal, which shows that it must have been similar in design to the façade of the Jahangiri Mahal. The foundations of what can undoubtedly be styled the Akbari Mahal were all disclosed by excavation, and the whole extent of the palace is now represented by shrubberies. The unsightly walls to the N. and S. of the main courtyard have been covered with creepers. The two small courtyards in front of the Akbari Mahal were probably constructed towards the end of the 18th century.

In the space in front of the Jahangiri Mahal is the *Hauz* of Jahangir, an enormous monolithic cistern of light-coloured porphyry, externally nearly 5 ft. high, and internally 4 ft. deep and 8 ft. in diameter at top; and at the N.W. corner is the head of the descent

to the Amar Singh Gate, so called from the elder brother of Maharaja Jaswant Singh of Jodhpur, who was disinherited by his father for his turbulence, and was killed here in 1648 with all his followers after a fatal brawl within the royal precincts. It was the S.W. bastion which was battered by Lord Lake in 1803 so successfully that the Mahratta garrison at once surrendered. Before descending to the Gate the beautiful little Early Mughal Pavilion, situated on high ground outside the S.W. corner of the Diwan-i-'Am court, should be visited. It is an ornamental structure of pleasing design, contemporary with the Jahangiri Mahal, but ascribed by some writers to Salim Shah.

Outside the Gate is the half-buried figure of a horse in red sandstone, and on rising ground to the S.W. are the cemeteries in which many who died in the fort during the summer of 1857 were buried. Near it is the N. end of the MacDonnell Park and the fine memorial of Queen Victoria, by Thorneycroft. The bronze statue, which is of a standing figure on a high base, was unveiled by King George V., then Prince of Wales, on 18th December 1905.

The Jami Masjid faces the Delhi Gate of the fort, close to the Fort Railway Station, and a fine view of it is obtained from the footbridge to the station. It stands upon a raised platform 11 ft. high, reached by flights of steps on the S. and E. sides. The mosque proper measures 130 ft. by 100 ft., and is divided into five compartments, each of which opens on the courtyard by a fine archway. The inscription over the main archway sets forth that the mosque was constructed by the Emperor Shah Jahan in 1648 in the name of his daughter, Jahanara, who afterwards shared her father's captivity (pp. 304 and 313). The great peculiarity of this

Masjid consists in its three great full-bottomed domes without necks, built of red sandstone, with zigzag bands of white marble circling round them.

On the W. side of the city is the **Agra College**, which owes its origin to the Gwalior State, of which the Maharaja at the end of the 18th century made over certain villages in the districts of Muttra and Aligarh to a learned Brahman for the twofold purpose of keeping up a Sanskrit School and of supplying the wants of pilgrims visiting the shrines around Muttra. In 1818 the original grantee left his lands in trust to the E. India Co., who devoted part of the proceeds to the establishment of this college and part to hospitals at Muttra and Aligarh. The College, opened in 1823, has over 600 students and 36 professors, lecturers, and demonstrators. It is managed by a board of trustees and forms part of the newly-constituted Agra University, which controls the external work formerly done by the Allahabad University. N. of the Agra College the grounds on each side of the Drummond Road belong to St John's College, the most important of the educational institutions of the Church Missionary Society in India. The buildings, which are an adaptation of the Mughal style of architecture to modern requirements, were designed by the late Sir Swinton Jacob, and contain a library and one of the finest halls in the country. Some 380 students—Christian, Hindu, and Muhammadan, assemble here daily at 10 A.M. in the cold weather for the opening prayers, and there is a lofty gallery in which visitors are freely accommodated. Adjoining the College are large schools for Christian boys and girls. E. of the Agra College, and situated in the Western outskirts of the city, is the Kalan Masjid. The mosque may be assigned to the Early Mughal

period. Extending Eastwards from the Drummond Road towards the Fort are the Dufferin Hospitals, Medical School and Thomason Hospital. The Medical School, founded in 1854, has 444 men and 55 girl students; teaching only is given, and no registrable qualification. The hospitals have about 400 beds, and treat over 50,000 patients annually.

E. of the Central Jail are the **Roman Catholic Cathedral, Convent, and Schools**, dedicated to the Virgin Mary, the first with a tower about 150 ft. high. The buildings are large, but not architecturally interesting. The Mission was founded in the time of Akbar, and has long been celebrated for its school, where the children of soldiers and others are educated. The earliest tombs connected with the settlement of Christians at Agra are in the R.C. cemetery at Lashkarpur, which lies $\frac{3}{4}$ m. to the N. The most ancient epitaphs are in the Armenian character. Among the tombs are those of Colonel John Hession (died 1803) and John Mildenhall (died 1614), and the notorious Samru, Walter Reinhardt (see p. 338). Hession's monument is a miniature of the Taj in red sandstone; Mildenhall's tomb is the earliest known tomb of an Englishman in India. N.W. of the Cathedral is the Kandahari Bagh (now Bharatpur House), where Shah Jahan's first Persian wife was buried, and N. of it again the Seth's Garden, once containing the graves of Faizi and Abul Fazl (p. 286) and their sister, Ladli Begam. In the Protestant cemetery, close to St Paul's Church in the Civil Station (immediately N.W. of the Central Jail) are the tombstones of three English factors, Ofley (1627), Drake (1637), and Purchas (1651).

$1\frac{1}{2}$ m. N.W. of the Civil Courts is **Dayal Bagh**, a settlement of the Radha Swami Sect, where in-

teresting experiments in education and social and religious life are being made.

The Tomb of I'timad-ud-daula lies about 250 yds. to the N. from the E. end of the E.I.R. bridge which crosses the Jumna close to the Fort, and which carries vehicular and foot traffic. (The Jumna Bridge station on the Tundla branch is just across the bridge.) It is the mausoleum built by the Empress Nur Jahan for her father, Mirza Ghiyas Beg, a Persian, who was grandfather of the lady of the Taj, and who became high treasurer of his son-in-law Jahangir. The tomb stands in a beautiful garden, which receives much attention, on a platform, 4 ft. high and measuring 150 ft., and is itself 69 ft. sq. At each corner is an octagonal tower 40 ft. high, and on the terrace of the roof is a pavilion 25 ft. sq.; and the design of the mausoleum seems to have served for that of the Emperor Jahangir also, built by Nur Jahan at Shahdara, near Lahore (p. 367). The centre room below, measuring 22 ft., contains the two tombs of I'timad-ud-daula and his wife, made of yellow coloured marble; the side rooms round it display paintings of flower vases, fruits, etc., which were also reproduced in the Shahdara mausoleum. The marble lattice-work of the passages admitting light to the interior is extremely fine. The pavilion on the terrace of the tomb has a curved roof and broad sloping eaves, and contains two marble cenotaphs corresponding to those below. The whole of the exterior and much of the interior is of white marble with beautiful inlay work. The inlay work here is the earliest of its particular character known in India (1628 A.D.), though its prototype will be recognised in the spandrels, etc., of the South Gateway of Akbar's Tomb at Sikandra (1614 A.D.).

Half-a-mile N. of this is the **Chini ka rauza**, or china tomb. The Persian influence will be noticed. It is the burial-place of Afzal Khan, who was in the service of Jahangir and Shah Jahan. He died at Lahore in 1639, and was buried at Agra in the tomb he had erected during his own lifetime. It has one great dome resting on an octagonal base. In the centre of the octagonal domed chamber, much ruined, are two tombs of brick, which have replaced marble tombs. Externally it is decorated with enamelled plaster work, such as was so successfully used on the public buildings at Lahore; the flower patterns of many of the panels are very effective, and must once have been very beautiful.

Farther up the left bank of the river again is the Rambagh, where the Emperor Babar is said to have been buried pending the erection of his mausoleum at Kabul. The river terrace of this garden is extremely picturesque.

The mausoleum of the Emperor Akbar at Sikandra, so named from Sikandar Lodi, who reigned 1488-1518 A.D., is $5\frac{1}{2}$ m. from the Cantonment at Agra, along the Muttra road. The Delhi Gate, built in Shah Jahan's time, is passed about $\frac{1}{2}$ m. W. of the S.W. corner of the Central Jail. There are two fine *Kos minars*, or milestones, and several tombs on the way. On the left side of the road, about 4 m. from Agra, and nearly opposite the lofty arched gateway of an ancient building called the Kachi ki sarai, there is a sculptured horse, said to have been erected in memory of a favourite horse of Akbar's, which died near this spot. At $\frac{1}{2}$ m. farther on, a little back from the road on the E. side, is a tank of red sandstone, with ornamental octagonal towers, called *Guru ka tal*. On the S. side are three flights of steps, and E. of them is a long and broad channel of masonry, which brought water

to the tank. $\frac{1}{2}$ m. beyond the mausoleum of Akbar is a red sandstone two-storeyed building, the ground floor of which contains forty chambers. Each corner of the building is surmounted by an octagonal *chhattri*. It is believed by some authorities to be the tomb of Mariam uz zamani, a Hindu wife of the Emperor Akbar, whom tradition has converted (on no authentic grounds) into a Christian. In 1838 the building was handed over to the Church Missionary Society for the accommodation of famine orphans. A church, school and parsonage houses were built later on, and the tomb was then converted into a printing press. In 1912 it was purchased by the Government and is now a protected monument. Cleared of modern excrescences, it stands practically in its original condition, except for much of the carved sandstone facing, which has, unfortunately, disappeared.

A fine gateway leads to the great garden enclosure in which the mausoleum of the Emperor Akbar is situated; on either side of it in flanking walls are boldly-pierced sandstone grilles. It is of red sandstone, inlaid with white marble in various polygonal patterns, very massive, and with a splendid scroll of Tughra writing a foot broad adorning it. On the top of the gateway, at each corner, rises a white minaret of three storeys; the cupolas destroyed over 120 years ago have been restored. There is a fine view from the platform at the top. A broad paved causeway leads to the mausoleum. It is a pyramidal building 74 ft. high, of four storeys, three of which are of red sandstone, the fourth, enclosing the cenotaph, being of white marble. The basement measures 320 ft. each way, and the top storeys 157 ft. Fergusson was of opinion (*Indian Architecture*, 2, 300) that the idea of the arrangement was taken from that of a

structural Buddhist monastery, but this hardly seems probable. A massive cloister runs round the lowest storey, broken in the centre of the façade by a lofty archway, the portion on the S. forming the entrance to the tomb chamber. The vaulted ceiling of the vestibule was elaborately frescoed in gold and blue, and a section of this has been restored. The Surah-i-mulk (chapter of the Koran) runs under the cornice in a scroll 1 ft. broad. A gentle descent leads to the dark vaulted chamber in which the great Akbar once rested: but Ját villagers pillaged the tomb, and burnt his bones. On the S. façade, on either side of the main arch some bays of the cloister are screened off, and contain tombs with inscriptions in beautiful characters. In a niche in the side of the room, farthest from the entrance, is an alabaster tablet inscribed with the 99 divine names.

Narrow staircases lead to the platforms and terraces above. The top storey is surrounded by a beautiful cloister of white marble, carved on the outer side into lattice-work in squares of 2 ft., every square of a different pattern. In the centre is the splendid white monolith cenotaph of the Emperor, engraved with the 99 glorious names of the Deity, just over the place where his dust rests in the vaulted chamber below. On the N. side of the cenotaph is inscribed the motto of the sect he founded, "Allahu Akbar," "God is greatest"; and on the S. side, "Jalla Jalalahu," "May His glory shine." To the N. of it, at the distance of 4 ft., is a handsome white marble pillar 2½ ft. high, which, according to tradition, was once covered with gold and contained the Koh-i-nur.¹ The wind sighing through the pierced screens maintains a perpetual solemn

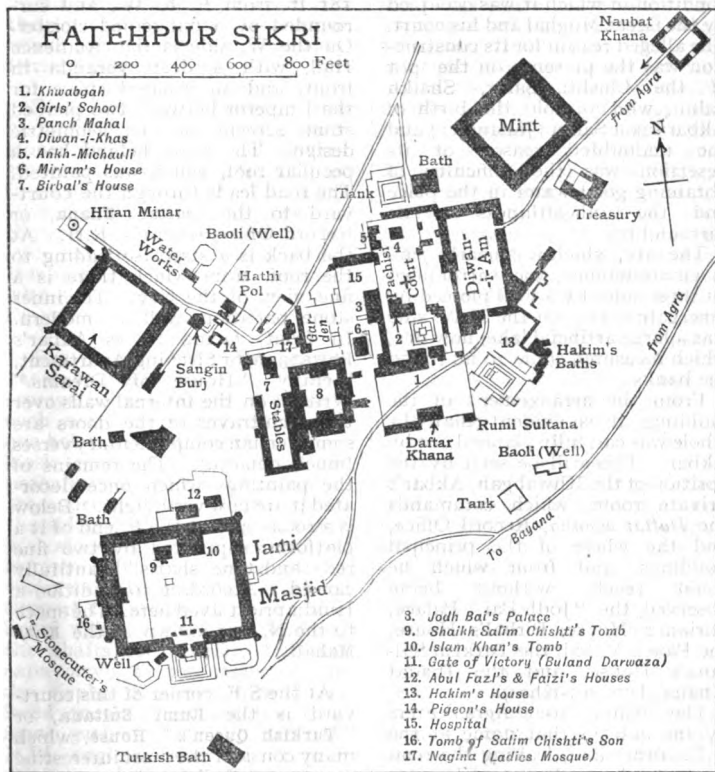
¹ The diamond of this name probably did not come into the Mughal possession till the reign of Shah Jahan. See Appendix to Ball's *Tavernier* (Macmillan, 1889).

requiem over the great Emperor. The gateway recesses in N., E., and W. walls of the garden are also decorated with marble mosaics. The cost of the tomb was 15 lakhs.

FATEHPUR - SIKRI. Motor-cars for the trip (23 m.) to Fatehpur-Sikri can be hired in Agra and

broad-gauge chord line from Agra Fort station to Bayana (Route 12).

The road runs through the suburb of Shahganj, at the entrance to which are the ruins of a mosque, with an inscription recording that it was built in 1621. It marks the site of the old Ajmir Gate. Farther on is a Moslem cemetery, with a tomb said to be



will also be supplied by the hotels. The road (which is the one used by Akbar himself) is a good one, and shady, but the drive is apt to be dusty. There is also a railway station (23 m.) on the B.B.C.I. Ry.

that of Mirza Hindal, son of Babar, father of Akbar's chief wife. At the foot of the tomb is a monolith 7 ft. high, with the date 1570. The road, like that to Sikandra, is marked by *Kos minars*, or mile-

stones, 20 feet in height, at distances of 2 m.

The royal but long-deserted city of *Fatehpur-Sikri*, standing on a low sandstone ridge, was the creation of Akbar, who built every structure in it, but abandoned it for Agra (p. 267). Owing to this fact, and on account of its very perfect preservation, it forms a unique specimen of a city in the exact condition in which it was occupied by the Great Mughal and his court. The alleged reason for its construction was the presence on the spot of the Chishti Saint, Shaikh Salim, who foretold the birth of Akbar's son Salim (Jahangir); and the undoubted reason of its desertion was the difficulty of obtaining good water in the place and the unhealthiness of its surroundings.

The city, which was nearly 7 m. in circumference, was surrounded on three sides by a wall pierced by nine gateways; on the N.W. side was a large artificial lake, now dry, which measured some 20 m. round the banks.

From the arrangement of the buildings it is evident that the whole was carefully planned out by Akbar. This will be seen by the position of the Khwabgah, Akbar's private room, which commands the *Daftar Khana*, Record Office, and the whole of the principal buildings, and from which he could reach, without being observed, the "Jodh Bai" Palace, Miriam's House, Birbal's House, the Panch Mahal, the Turkish Sultana's House, and the Ibadat Khana (Diwan-i-Khas).

The visitor from Agra enters by the gate of that name at the N.E. corner and, leaving the road to the modern village and Bayana (p. 254) on his left, drives past a large quadrangle with a ruined cloister, which was used either as a bazar or as barracks. The road passes beneath the Naubat Khana, from the upper rooms of which musicians played as Akbar

entered the city. Farther left are the remains of the **Treasury**, and opposite it what is known traditionally as the **Mint**, a large quadrangular building. Near the mint a new Travellers' Rest House has been built. Beyond this the road enters the inner enceinte of the palace and the court in front of the **Diwan-i-'Am**, measuring some 366 ft. from N. to S. by 181 ft. from E. to W., and surrounded by a flat-roofed cloister. On the W. side is the Audience Hall, with a deep veranda in front, and an isolated space for the Emperor between two pierced stone screens of fine geometric design. The room behind has a peculiar roof, which was painted. The road leads through the courtyard to the **Daftar Khana**, or Record Office, once the R.H. At the back is a staircase leading to the roof, from which there is a fine view of the city. The inner stone partition wall is modern. In front, facing N., is Akbar's **Khwabgah**, or Sleeping Apartment, literally "House of Dreams." Written on the internal walls over the architraves of the doors are some Persian complimentary verses (much defaced). The remains of the paintings which once decorated it are now very slight. Below is a room, and at the E. end of it a platform, supported by two fine red sandstone shafts, beautifully carved. According to tradition a Hindu priest lived here. The space to the N. was known as the **Khas Mahal**.

At the S.E. corner of this courtyard is the **Rumi Sultana**, or "**Turkish Queen's**" House, which many consider the most interesting apartment of all. As it now stands it consists of only one small chamber, 15 ft. by 15 ft. Every square inch is carved, including the soffits of the cornices. The ceiling and decoration of the veranda pillars and pilasters are exceptionally fine. Inside is a most elaborate

dado about 4 ft. high, consisting of eight sculptured panels representing forest views, animal life, etc. Above, the wall takes the form of a stone lattice screen, the divisions of which were used as shelves. Much of the carving is curiously like Chinese work, and reminds one of what Abul Fazl says of the local red sandstone: "Clever workmen chisel it so skilfully as no turner could do with wood, and their works vie with the picture-books of Mani" (a legendary Persian painter).

W. is the **Girls' School**, a small, plain building, carried on square stone piers. Upon the paving-stones of the open space in front (E.) is the Pachisi board,¹ with the Emperor's stone seat in the centre, in the form of a cross laid out in coloured pavement. It is said that the game was played with slave girls as pieces to make the moves.

Just to the N. of this is the **Panch Mahal**, a building of five storeys, borne by open colonnades, each tier being smaller than the one below, till nothing but a small kiosk remains on top. It was probably erected for the ladies of the court as a pleasure resort, as the sides were originally enclosed with stone screens. The first floor is remarkable on account of the variety of the 56 columns which support the storey above, no two being alike in design. Many of the shafts are similar, but the caps vary; at the angles of one are elephants' heads with interlaced trunks; on another is a man gathering fruit. On the N.W. angle is a group of four columns, which should be examined. From the topmost floor there is a splendid view.

At the N. of the quadrangle is the so-called **Diwan-i-Khas**, or hall

¹ There is a similar board in the Saman Burj in Agra Fort (p. 275).

of private audience: it is generally known as the **Ibadat Khana**, or worship house (completed in 1575), although the identification has been disputed. From the outside it appears to be two storeys high, but on entering it is found to consist of one only, with a central pillar crowned by an immense circular corbelled capital, radiating from which to the four corners of the building are four stone causeways enclosed by open trellis stone balustrades (restored). Tradition says that in the centre of this capital the Emperor sat, whilst the priests of different religions disputed around him; and the corners were occupied by the four Ministers. The shaft is beautifully carved, and deserves careful study. On the E. and W. sides are stone staircases communicating with the roof. The open screen-work in the windows is modern. A few feet to the W. is the building known as the **Ankh Michauli**. The story told is that the Emperor here played hide-and-seek with the ladies of the court; but it was most likely used for records. It consists of three large, lofty rooms, surrounded by narrow passages. The ceilings of two of the rooms are curved, but the third is flat, and supported on struts ornamented with grotesque carving. In front of the S.E. corner is a small canopied structure said to have been used by an astrologer, who probably was a Hindu Guru, or "teacher." The *torana* brackets are essentially Hindu in character: otherwise the original design is typically early Mughal. The under side of the dome was painted. Adjoining these buildings to the W. is the Hospital, with some of the stone partitions forming the wards still extant. The ceilings are of solid slabs of stone, carved on the exterior to represent tiles.

Outside, to the W. of the Khas Mahal enclosure is the **House**

of **Miriam**, traditionally a Portuguese Christian, but really the Jaipur Princess who bore the title **Mariam uz zamani**, and was mother of Prince Salim, afterwards the Emperor Jahangir. This is a small building with defaced frescoes in the niches and upon the walls and piers of the veranda. One, in which the wings of angels are distinctly visible, has been thought to suggest the Annunciation. At one time the whole house was painted inside and out. The original name **Sonahri Makan**, or "Golden House," was given it on account of the profuse gilding with which its walls were adorned. On the N.W. is **Miriam's Garden**, and at the S.E. angle her bath, with a large column in the centre. On the W. side is the **Nagina**, or **Ladies' Mosque**, and the remains of a small Turkish bath. At the S. end of the garden is a small fish tank, which, together with the stone pavement of the garden, was brought to light by Mr E. W. Smith.

To the N.W. a road leads to the **Hathi Pol** (Elephant Gate) on the N. of the city. Over the W. archway, 20 ft. from the ground, are two life-sized elephants much mutilated—probably by Aurangzeb. On the left of the gateway are the so-called **Pigeon House**—possibly intended for a magazine—and the **Sangin Burj**, a groined bastion or keep, said to have been the commencement of the fortifications planned by Akbar, but abandoned on account of objections raised by Shaikh Salim Chishti. Down the old stone-paved road on the left is the **Karawan Sarai** (caravanserai). It consists of a large court 272 ft. by 246 ft., surrounded by the merchants' hostels. Formerly the S.E. side was three storeys high. At the N. end, beyond the Sarai, stands the **Hiran Minar** ("Deer Minaret"), a circular tower some 70 ft. high, studded with protrud-

ing elephants' tusks of stone. Tradition says that it is erected over the grave of Akbar's favourite elephant, and that from the lantern in the top the Emperor shot antelope and other game driven under it by beaters. The land to the N. and W. was a large lake in Akbar's time.

On the left of the road returning to the **Hathi Pol** is a very fine stone well surrounded by rooms and staircases, which formed a part of the waterworks. The water was lifted from this level by a series of Persian wheels and a system of reservoirs to the arched gate on the N.W. corner of **Birbal's House**, and thence distributed throughout the palace.

The **Palace of Birbal** stands to the S.W. of **Miriam's Garden**, near the N.W. corner of the **Jodh Bai** palace. It is the finest in **Fatehpur-Sikri**, and is said to have been built by **Raja Birbal** for his daughter, who, however, was not one of the wives of Akbar. It is a two-storeyed building of red sandstone standing on a raised platform, and consists of four rooms 15 ft. square, and two entrance porches on the ground floor and two above with small terraces in front of them, enclosed originally by stone screens, forming a ladies' promenade. Over the upper rooms are flat-ribbed cupolas, carried on octagonal drums, and supported on richly-ornamented corbel brackets stretching across the angles of the rooms; and the stone-panelled walls and niches are covered with intricate patterns. The ceilings of the lower rooms are supported on a fine and unique frieze, and the whole of the interior—pilasters, recesses, walls, and cusp-arched doorways—are elaborately and beautifully carved with geometrical patterns. The exterior walls are almost as profusely ornamented. No wood has been used in the construction of this extraordinary building, to

which the words of Victor Hugo have been applied: "If it were not the most minute of palaces, it was the most gigantic of jewel-cases." Raja Birbal was celebrated for his wit and learning, and was the only Hindu of eminence who embraced the new religion of Akbar, whose favourite courtier he was. He perished with the whole of the army he was commanding in the Yusafzai country to the N.E. of Peshawar in 1586.

S. of Birbal's house are the **Stables** for 102 horses and nearly as many camels. In some of the mangers stone rings for the horses' halters still remain, and on the N.W. side one of the old doors. The camel stables are lighted by openings in the roof.

The **Palace of Jodh Bai** is probably erroneously so called, as it is more likely that it was used by the Emperor or by his chief wife, Sultana Rakiya, who was also his first cousin. The entrance is on the E. from the open space in front of the *Record Office*. It is a quadrangular building 232 ft. by 215 ft. The courtyard within has reception rooms on the N., S., and W. sides, connected by a flat-roofed corridor partly closed by stone walls. The room on the W. is more ornate than the others, and in the rear wall is a fireplace. There are chambers above, and those on the N. and S. sides rise to two storeys; they are gable-roofed and ornamented with blue enamelled tiling, recalling the **Man Mandir Palace of Gwalior** (p. 186). At the angles the chambers are surmounted by cupolas, originally painted. Overlooking Miriam's garden is a small projecting room, the walls of which are entirely composed of beautiful stone lattice work. From the mezzanine floor on the N. side a closed passage leads to a garden abutting on the waterworks, beside which a gallery (now in ruins

and not easy of identification) passed to the N. side of the Sarai near the Hiran Minar. In the passage, and just before the garden is reached, is a very fine stone screen beneath a small cupola.

The **Dargah Mosque** lies S.W. of the Jodh Bai Palace. The E. gate, called the **Badshahi**, or "royal" gate, opens into the quadrangle, which measures 433 ft. by 366 ft. To the right is the Tomb, or Dargah, of Shaikh Salim Chishti, a descendant of the Shakkar Ganj Pir, who is buried at Pak Pattan (*see* pp. 222 and 400). It is surrounded by beautiful white marble lattice-work screens, the outer entrance doors also being of marble. The canopy over the tomb of the saint is inlaid with mother-of-pearl, no longer adorned with ostrich eggs over it. On the cenotaph is written the date of the saint's death (1571) and the date of the completion of the building, (1580), "May God hallow his tomb! —the beloved helper of the sect and its saint, Shaikh Salim, whose miraculous gifts and propinquity to the Divine Being are celebrated, and by whom the lamp of the family of Chishti is illuminated. Be not double-sighted, looking to the transitory self, as well as to the everlasting Deity. The year of his decease is known throughout the world."¹ The brackets which support the dripstone or eaves of the tomb are copies of those in the old mosque of the stone-cutters. Childless women, both Hindu and Muhammadan, resort to the tomb and pray the saint to intercede in their favour. On the N. of the quadrangle is also the tomb of Islam Khan, surmounted with a cupola; he was the grandson of the saint and Governor of Bengal.

The **Mosque** proper, to the W., is said to be a copy of the one

¹ All the inscriptions here may be found in the *Miftah-ul-Tawarikh*, by John Ellis, printed at Agra.

at Mecca. It is about 70 ft. high, and very beautiful. It consists of three interior square chambers surrounded by rows of lofty pillars of Hindu type. At the N. and S. ends are zenana chambers. Going out by a door at the back of the mosque, in an enclosure on the right, is an infant's tomb, said to be that of the saint's son, whose life was sacrificed at the age of six months in order that Akbar's son (Jahangir) might live when born. In the S. wall of the quadrangle is the Gate of Victory, Buland Darwaza ("high gate"), which towers to the height of 130 ft. Fergusson (*Indian Architecture*, 2, 297) expresses the opinion that when looked at from below its appearance is noble beyond that of any portal attached to any mosque in India, perhaps in the whole world. The grandeur of this great height is increased by a fine flight of steps on the outside, giving a total height of 172 ft.¹ There is a grand view from the top.

In the archway is an inscription on the left hand going out, which says that the "King of Kings, Shadow of God, Jalal-ud-din Muhammad Akbar, the Emperor, on his return from conquering the kingdoms of the S. and Khandesh, formerly called Dhandesh, came to Fatehpur in the 46th year of his reign (corresponding to 1601 A.D.), and proceeded from thence to Agra." On the opposite side is inscribed: "Isa (Jesus), on whom be peace, said: 'The world is a bridge, pass over it, but build no house on it. The world endures but an hour, spend it in devotion.'" The doors of this great gateway are studded with iron shoes, affixed by the owners of animals, who implore the prayers of the saint for their recovery. From the steps, or, better still, from the summit of the gate,

may be seen the villages of Sikri and Fatehpur and the surrounding tract of barren country. To the W. of the steps is a large well, into which boys and men used to spring from the walls from heights varying from 30 ft. to 80 ft.; a case occurred as recently as 1926, but the practice has been prohibited. A *Mela*, or fair, commences on the 20th of *Ramzan*, the anniversary of the saint's death, and lasts for eight days. In front of the steps are some Turkish baths.

W. of the mosque, and outside the quadrangle, is the old *Mosque of the stone-cutters*, where Shaikh Salim lived in a cave covered by a room. (None but Muhammadans may enter.) In a portico on the right the saint taught his disciples. The stone-cutters are said to have built it for him before the foundation of Akbar's city. Near the mosque outside the N. wall of the Dargah are the houses of the brothers *Abul Fazi* and *Faizi*, the learned favourites of Akbar and followers of his new religion, now used as a boys' school. Faizi was appointed poet-laureate in 1588 and died in 1595. Abul Fazi, the "King's Jonathan," was murdered in August 1602, on his way to Agra from the Deccan, by Raja Bir Singh of Orchha, at the instigation of Salim (Jahangir). A little to the N.E. of the Record Office to the right of the road to the Dwani-i-'Am, is the *Hakim's*, or doctor's house, and a very large and fine *Hammam*, the walls and ceilings of which are richly ornamented with stamped plaster-work. To the right on leaving, and adjoining the high road below, is a spacious and interesting *Baoli*, from which the baths and this part of the city were supplied. Leading to a well at one end is a broad staircase enclosed on each side by rooms. Around the well are chambers for Persian wheels for drawing the water.

¹ The gate and shrine are specially noticed by the traveller William Finch, who visited Fatehpur-Sikri in 1610.

ROUTE 14.—DELHI

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DELHI * (lat. $28^{\circ} 39'$, long. $77^{\circ} 16'$, pop. 304,420 in 1921), the old Mughal capital was by the Imperial Proclamation on the 12th December 1911, on the occasion of the Darbar, once more re-established as capital by H.M. King George V. In point of numbers it is the sixth city in India.

The temporary city on the N. of Delhi city, which was built for the accommodation of the Government of India and its secretariat staff, has now been vacated on the completion of the buildings of the new capital, on the S. and W. of the old city. A detailed description of New Delhi, together with a plan showing the sites of the buildings erected, under construction or proposed, is given on pp. 322-326.

Delhi is famous for its jewellers, silversmiths, and embroiderers, and many artistic products of other parts of India will be found in its shops, the principal workers being situated in the centre and E. end of the Chandni Chauk.

The Central ry. station, now one of the largest in India, lies in Queen's Road on the N. side of the city; the Queen's Gardens separate it from the Chandni Chauk, which forms a street running E. and W. from the Fort and Palace, on the Jumna, to the Fatehpuri Mosque, near the Lahore Gate. Facing the S.W. angle of the Fort is the great Jami Masjid. In the N. wall of the city are the Kashmir and Mori Gates; at the N.W. corner the Kabul Gate; below it the Lahore Gate; at the S.W. corner the Ajmer, and at the S. the Turkoman and Delhi Gates. Of these gates, only the Kashmir, Ajmer, Turkoman and Delhi Gates survive in their original forms. Outside the N. wall lies the civil station, bounded on the E. by the river and on the W. by the Ridge, beyond which the Cantonment lay in 1857. S. of the modern city, which should properly be known

by the name of Delhi-Shahjahanabad, and in the direction of the new capital, the ruins of old cities and fortresses stretch for 12 m. to the S.—first Firozabad, then Indrapat, with the tomb of the Emperor Humayun and the Shrine of Nizam-ud-din Aulia beyond it; then, at a considerable interval farther to the S.W., the ruins of the defences of Siri, Jahanpanah, and the Fort of Rai Pithora, in the citadel of which are situated the Kutb Mosque and Minar, 11 m. from Delhi, and, finally, 5 m. E. of the Kutb, the remains of Tughlakabad and the fortress round it.

The sights of Delhi cannot be comfortably seen in less than four or five days. For those who can spare only three days to them, the following itinerary may be of use :—

1st Morning.—Fort and Palace, Jami Masjid, Kalan Masjid, Jain Temple, and Chandni Chauk.

Afternoon.—Firozabad, Indrapat, and New Delhi.

2nd Morning.—Visit sights outside the city in connection with the Mutiny and Siege, driving out by the Kashmir Gate and returning by the Mori Gate.

Afternoon.—Drive by the mausoleum of Ghazi-ud-din to Jai Singh's Observatory and Safdar Jang's Tomb, and round by the tomb of Nizam-ud-din Aulia to that of Humayun, and so back past Indrapat.

3rd Day.—Starting early, drive to Kutb (stopping, if possible, *en route* to see the tank of Hauz Khas). After an early luncheon, proceed to Tughlakabad, and back by the Muttra Road to Delhi.

Motor-cars can be obtained on hire at a number of garages in Delhi.

The Architecture of Delhi.

The buildings in and round Delhi may be conveniently classified as follows, according to their dates and styles. The so-called

early Pathan style is really Turki, but the old nomenclature is generally followed:—

(1) Early Pathan, 1193-1320.

The Kutb Mosque and Minar—the tomb of Altamsh; the Alai Darwaza (p. 318) and the Khizri or Jamat Khana Mosque at Nizam-ud-din (p. 313).

At first, adoption and adaptation of Hindu materials and style to Saracenic motifs and requirements; then, developments of elaborate and beautiful decorative features from Hindu prototypes.

(2) Middle Pathan, 1320-1414.

Earlier style.—Tughlakabad and tomb of Tughlak Shah (pp. 320-321).

Later and severer style.—Kalan Masjid of Delhi (p. 303); mosque of Kotla Firoz Shah (p. 309); Kadam Sharif (p. 305); ruined buildings on the Ridge (p. 308); Hauz Khas tomb (p. 314); mosques of Nizam-ud-din, Begampur, and Khirki (pp. 312, 314, and 320).

First, buildings of finely-cut stone, or of red sandstone with sloping walls, marble dressings being sparingly used; then buildings with sloping walls of stone and mortar plastered all over, and borne by rough columns of simple rectangular stones; mosques generally built on high raised platforms.

(3) Later Pathan, 1414-1556.

Tombs of Saiyad and Lodi Kings (p. 313); Purana Kila and Mosque (p. 310); Jamali Mosque (p. 319); tomb and mosque of Isa Khan (p. 312).

Buildings usually with fine domes, and decorated with coloured marbles and tiles, and in some cases inside with fine plaster ornamentation.

(4) Mughal, 1556-1660.

Earlier.—Tomb of Humayun (p. 310); tomb of Azam Khan (p. 313).

Middle Period.—Fort and Palace of Delhi (p. 298); Jami Masjid, Delhi (p. 302); Fatehpuri Masjid, Delhi (p. 305).

Later decadent style.—Zinat-ul-Masajid Mosque (p. 302); Moti Masjid at Mahraulti (p. 320); Sonehri Masjids in Chandni Chauk (p. 304), and of Javed Khan (p. 302); mosque, tomb, and college of Ghazi-ud-din Khan (p. 303); tomb of Safdar Jang (p. 314).

Buildings at first of red sandstone, with marble dressings; restrained decoration. In the middle period, white marble increasingly used; decoration more free; domes assume bulbous form, and lofty minarets prominent. In the late Mughal style, tendency to over-elaboration with florid decoration.

History.¹—Though the country round Delhi is connected with the early history of India, as recorded in the *Mahabharata* (Introd. p. lxii), little is known of the place prior to the Muhammadan conquest in 1193 A.D. According to tradition, a city called Indraprastha was founded by a king called Yudhishtira, and the fort of Indrapat, also called Purana Kila, or "Old Fort," stands, perhaps, on the site, although recent excavations have revealed nothing which can be referred definitely to pre-

¹ Those interested in the history and archaeology of Delhi will find the fullest details in *Delhi Past and Present*, by Mr H. C. Fanshawe, C.S.I., formerly Commissioner of the Delhi Division. (Murray, 1902.) The book is, unfortunately, out of print and must be consulted in a library; but there are other books such as: *The Seven Cities of Delhi*, by G. R. Hearn (Thacker, 1907); *Delhi, its Story and Buildings*, Sir Henry Sharp (Oxford Univ. Press, 1921).

Muhammadan times. The extensive ruins lying S. of modern Delhi, and covering an area of about 45 sq. m., are the remains of many forts or cities, built by different kings. The oldest are the Hindu forts of Lal Kot, built by Anang Pal Tomar in 1052 A.D., and of Rai Pithora, Chauhan, the Prithvi Raja, built by the King of that name about 1180 A.D. These two forts, the two Asoka pillars, and the iron pillar at the Kutb are the only remains of the Hindu period, with the exception of the Suraj Kund and the Arangpur *bund*, an embankment, $2\frac{1}{2}$ m. S.W. of Adilabad. The earliest Muhammadan forts or cities were Siri, built by 'Ala-ud-din in 1304 A.D.; Tughlakabad, built by Tughlak Shah in 1321 A.D.; and Jahanpanah, enclosed by Muhammad Tughlak, about 1325 A.D. Subsequently Firozabad was constructed by the Emperor Firoz Shah Tughlak, and the Purana Kila was founded and built by Humayun and Sher Shah. This new Delhi was not favoured by the Emperors Akbar and Jahan-gir, and the modern town dates from the commencement of the fort by Shah Jahan in 1638, whence it was called Shahjahana-bad. Delhi has been frequently attacked and often captured since it was conquered by the Muhammadans of Ghor and became the temporary capital of the Muhammadan empire of India. It was sacked by Timur, the Mughal, in 1398; by Nadir Shah, the Persian, in 1739; and by Ahmad Shah Durani, the Afghan, in 1756. On the 10th March 1739 the small Persian garrison which Nadir Shah had introduced into the city when he occupied it was almost entirely put to the sword by the people. On the 11th he gave his troops, who had been summoned from the encampment outside the city, orders for a general massacre. From sunrise till 12 o'clock Delhi

presented a scene of appalling carnage, the horrors of which were increased by the flames ignited in almost every quarter of the capital. The Mughal Emperor Muhammad Shah then interceded for the people. Nadir Shah replied, "The Emperor of India must never ask in vain," and commanded the massacre should cease. A vast multitude of persons had, however, perished, and Nadir Shah carried with him from Delhi treasures estimated at from 30 to 70 millions sterling, the famous Peacock Throne, and the Koh-i-nur diamond.

In 1759 the Mahratta Chief, Mahdaji Scindia, captured Delhi, and the Mahrattas held it till September 1803, when General Lake defeated Louis Bourquien, commanding Scindia's army, and gained possession of Delhi and of the family and person of the Emperor Shah Alam. In October 1804 Delhi was besieged by the Mahratta Jaswant Rao Holkar, but was successfully defended by the British under Colonel William Burn (p. 305). From that time to 1857 the old capital of India remained in the possession of the British, although the descendants of the Mughal were allowed some show of royalty and the name of King. The last King, Bahadur Shah, succeeded in 1837, and was about eighty years old when the Mutiny broke out. With his death at Rangoon, in 1862, the last vestige of the Mughal dynasty disappeared. Till 1857 Delhi and the surrounding districts as far as Gurgaon, Hissar, and Karnal, were under the administration of the N.W.P., but in 1858 they were placed under the Punjab Government.

As a result of the changes announced in 1911, the Chief Commissionership of Delhi was constituted (without a Legislative Council) on the 1st October 1912. The area of the Delhi Province, which is immediately under the

management and authority of the Governor-General, is 557 sq. m. It has a population (including Delhi city), of 488,188 persons. Included within its boundaries are the whole of the Delhi *tahsil* of the old Delhi District of the Punjab, such parts of the Ballabgarh *tahsil* of the same unit as are included in the police station of Mahrauli, and 65 villages formerly belonging to the Meerut District of the United Provinces. The adjoining Punjab Districts of Gurgaon and Rohtak have been enlarged so as to include the portions of the old Delhi District not absorbed in the Delhi Chief Commissionership, and the headquarters of the Divisional Commissioner have been transferred from Delhi to Ambala. The present (1929) Chief Commissioner of Delhi is Sir John Thompson, K.C.I.E., C.S.I.

The Mutiny, 1857.

As the principal events of the great mutiny of the Bengal army in 1857 centred originally round Delhi, it is desirable to give a somewhat detailed account of them in this connection.

On the 10th of May 1857 there was in the large Cantonment of Meerut, 42 m. N.W. of Delhi, a British force consisting of a battalion of the 60th Rifles, the 5th Dragoon Guards (Carabiniers), and a large force of Artillery, though only two field-batteries were fully equipped. The Bengal troops were one regiment of Cavalry (the 3rd) and two regiments of Infantry (the 11th and 20th)—in all about 2500 strong.

On the evening of that date, Sunday, the troopers, and after them the two regiments, broke into mutiny, and released eighty-five men of the 3rd Cavalry, who had been imprisoned the previous day. Owing to the incompetence of General Hewitt, the officer com-

manding the division, adequate use was not made of the British troops, and the mutineers, after a brief period of murder and robbery, started unpursued for Delhi, where there were three Bengal regiments of Infantry (the 38th, 54th and 74th) and a battery of Bengal Artillery, but no British troops. On reaching that place early the next morning, the troopers first called upon the King from below the palace walls to join them, and then made their way into the city and attacked the civil officers, who had received news of the outbreak at Meerut, and were attempting to prevent the mutineers from entering. These officers, the Commissioner (Mr Simon Fraser), the Collector (Mr Hutchinson), and Captain Douglas, Commandant of the Palace Guard, were compelled to fall back into the Fort, and were there shortly afterwards murdered by the mob. When the 54th Regiment marched down from the Cantonment to the Kashmir Quarter Guard at the N.E. corner of the city most of the officers were shot down by the troopers, and the men of the regiment refused to act—an example followed by the 74th Regiment, which was sent down later. Meanwhile the officer in charge of the Arsenal, Lieutenant Willoughby, who had been forewarned by the civil magistrates, made a desperate attempt with his subordinates to hold that place against the mutineers until aid should arrive from Meerut, and when defence was no longer possible, blew up the magazine, and managed to escape to the Kashmir Gate with some others. After the explosion the troops there broke out into open mutiny, and shot most of the remaining officers, a few escaping over the face of the Kashmir Bastion. The Europeans in the Cantonment, who had collected at the Flagstaff Tower, were then compelled to take flight to Karnal. Before

nightfall every vestige of British power had disappeared from Delhi.

Measures were at once taken by General Anson, the Commander-in-Chief of the army, who was at Simla, to collect a force for the recapture of Delhi, and by Sir John Lawrence and the officers of the Punjab to anticipate the mischief of further mutiny. The troops were unable to advance for some time, owing to the usual state of unpreparedness prevailing at that period, and it was not until the 5th June that they reached Alipur, 10 m. from Delhi, under the command of Major-General Sir H. Barnard (General Anson having died of cholera at Karnal on 27th May). There the Ambala force was joined by that from Meerut under Brigadier-General Archdale Wilson, who had defeated the rebels twice near Ghaziabad (p. 337).

On the following day the combined forces marched on Delhi, and found the rebels well posted and supported by thirty guns 6 m. N. of Delhi, at the village of Badli-kisara. Attacking the mutineers, General Barnard gained a complete victory. The most important result of this success was to give the British possession of "the Ridge," from which all subsequent operations against Delhi were made.

"The tents of the British were pitched a little to the rear of their old houses, behind the left and centre of the Ridge, obliquely to the front of attack, and effectually concealed from the besieged. The position on the extreme right invited attack. It was surmounted by an extensive building known as Hindu Rao's House.¹ A strong body of troops was posted here and in an old observatory near it. About 800 yds. to the N. of Hindu Rao's House, and on the Ridge, was an old mosque, and again 800

yds. to the N. was the Flagstaff Tower, a double-storeyed circular building—a good post for observation, and strong enough to afford shelter to troops. At these four points General Barnard established pickets supported by guns. Below Hindu Rao's House, on the right flank, was the suburb of Sabzi-mandi, which, with its houses and walled gardens, afforded shelter to the enemy, and was, in fact, the key of the English position. Beyond Sabzi-mandi, towards the Kabul Gate, were the suburbs of Kishanganj, Trevelyanganj, Paharipur, and Teliwara—all strong positions, which covered the enemy when they advanced to the attack, but were too near the city walls for us to occupy. Opposite the mosque picket, to the E., was Metcalfe House, on the banks of the Jumna, with substantial outbuildings, and a mound in the rear, which seemed to recommend it for occupation. Between it and the city was an old summer palace of the Emperor, the Kudsia Garden, with lofty gateways and spacious courtyards, and in a line between the latter and Hindu Rao's House was Ludlow Castle, the house of the late Commissioner Simon Fraser."¹ To take this great walled city General Barnard had a force of about 3000 British, one Gurkha battalion, the Corps of Guides, the remnant of certain Bengal regiments, and twenty-two guns. At first it was intended to assault the city by night, but, as failure would have been disastrous, it was considered best to delay till the expected reinforcements had arrived. Between the 12th and 18th June the rebels attacked the British position four times in front and rear. Again on the 23rd, the

¹ Hindu Rao was a brother of Baiza Bai of Gwalior (p. 98). He settled at Delhi and died there in 1855.

¹ The best account of the Siege of Delhi is Captain (afterwards Field-Marshal Sir Henry) Norman's Narrative, republished in *Delhi, Past and Present*. Those who desire a concise account, without military technicalities, cannot do better than refer to Holmes' *Indian Mutiny* (Macmillan, 1904).

anniversary of Plassey, they attacked fiercely, having been reinforced by the mutineers from Nasirabad; fortunately the British by that time had received an additional 850 men.

On the 24th Colonel Neville Chamberlain arrived with the 8th and 61st Foot, the 1st Punjab Infantry, a squadron of Punjab Cavalry, and four guns, raising the British strength to 6600. The rebels also received an accession of about 4500 from Bareilly.

On the 5th July General Barnard died of cholera, and was succeeded by General Reed.

On the 9th and 14th of July fierce engagements were fought on the right of the British position, near Hindu Rao's house, in and about the Sabzi-mandi, in which 25 officers and 400 men of our force were killed and wounded.

On the 17th of July General Reed resigned the command to Brigadier-General Archdale Wilson. At this time the besieging force was in great difficulties: two Generals had died, a third had been compelled by illness to resign, the Adjutant-General and Quartermaster-General lay wounded in their tents, and the rebels had attacked so often, and with such obstinacy, that it had come to be acknowledged that the British were the besieged and not the besiegers. On the 18th of July the rebels made another sortie, which was repulsed by Colonel Jones of the 60th Rifles. The Engineer officers now cleared away the walls and houses which had afforded cover to the enemy, and connected the advanced posts with the main pickets on the Ridge. After this there were no more conflicts in the Sabzi-mandi. On the 23rd of July the enemy streamed out of the Kashmir Gate, and endeavoured to establish themselves at Ludlow Castle. They were driven back, but the British were drawn too near the city walls, and suffered severe loss.

Reinforcements were now on their way from the Punjab, commanded by one of the best soldiers that India had ever produced—Brigadier-General John Nicholson. On the 7th of August Nicholson stood on the Ridge at Delhi. He had come on in advance of his column of 2500 men, which arrived on the 14th.¹ On the 25th he marched out to the S.W. towards Najafgarh with a strong force to attack the mutineers, who had moved to intercept the siege train coming from Ferozepore. The march was a difficult one, through deep mud. He found the mutineers in three bodies, occupying two villages and a garden in front, all protected by guns. Crossing a ford where the water was breast-high, Nicholson, at the head of the 61st Foot and the 1st Bengal European Fusiliers, stormed the garden and captured the guns; but the sepoys fought well and sold their lives dearly. Those who survived made for the bridge crossing the Najafgarh Canal, and fled to Delhi; in all 800 were killed and thirteen guns were captured. General Nicholson blew up the Najafgarh Bridge, and returned to camp next day.

On the morning of the 4th of September the siege guns, drawn by elephants, with an immense number of ammunition wagons, reached the camp. On the 6th the rest of the 60th Rifles from Meerut marched in. On the 8th the Kashmir Contingent arrived, with Colonel R. Lawrence at their head. Many, and amongst them foremost of all Nicholson, chafed at the delay which occurred in storming Delhi. The responsibility of the attack rested with General Archdale Wilson, who had thus stated the magnitude of the enterprise in a letter to Colonel Baird Smith, commanding the

¹ Between 15th and 22nd August Lieutenant Hodson made his successful cavalry raid to Rohtak, and cut up and scattered the rebels there.

Engineers, on the 20th of August : " Delhi is 7 m. in circumference, filled with an immense fanatical population, garrisoned by fully 40,000 soldiers, armed and disciplined by ourselves, with 114 heavy pieces of artillery mounted on the walls, with the largest magazine of shot, shell, and ammunition in the Upper Provinces, besides some 60 pieces of field artillery, all of our own manufacture, and manned by artillerymen drilled and taught by ourselves, the Fort itself having been strengthened by perfect flanking defences, erected by our own engineers, and a glacis which prevents our guns breaching the walls lower than 8 ft. from the top." These circumstances led General Wilson to write that the chances of success were, in his opinion, anything but favourable, but that he would yield to the judgment of the Chief Engineer. Many condemned his apparent reluctance to order the assault, but they have since acknowledged that they did him less than justice, for the principles of warfare were upon his side.

Investment by the British, with their limited means, being impossible, it was necessary to concentrate all their breaching power on a portion of the walls. This consisted of the Mori, Kashmir, and Water Bastions, with their connecting curtains. This front was chosen because the fire of the Mori Bastion alone commanded the approach to it, and because there was excellent cover to within a short distance of the walls. On the evening of the 6th of September a light battery,¹ consisting of six 9-pounders and two 24-pounders, under the command of Captain Remington, was constructed on the plateau of the Ridge to protect the operations going on below. On the night of the 7th the first heavy

battery¹ was constructed at 700 yds. from the wall. It consisted of two parts connected by a trench. The right portion held five heavy guns and a howitzer, the function of which was to demolish the Mori Bastion. The left held four guns to keep down the fire of the Kashmir Bastion. While darkness lasted the enemy only fired twice, but when the morning revealed the British plans, the rebels poured in a shower of shot and shell ; but the British persevered in their work, and before sunset the rebel battery was silenced. The British had lost 70 men in the trenches. The left section of their battery maintained a fire on the Kashmir Bastion during the greater part of three days, but at noon on the 10th it took fire, and the guns were of necessity withdrawn. By that time No. 2 Battery had been finished—the left section immediately in the front of Ludlow Castle, and the right section 90 yds. to the S. of it.² Both were within 600 yds. of the city ; the right section had seven howitzers and two 18-pounders, and the left section nine 24-pounders.

This battery did not open fire till No. 3 Battery was completed. It was built in the Kudsia Garden, behind part of the Custom House, at 180 yds. from the Water Bastion, on which it was to play. The enemy poured in such an incessant fire of musketry, with occasional shells, that it was impossible to work in the day and difficult at night. Meantime a powerful mortar battery was also constructed in the Kudsia Garden. At 8 A.M. on the 11th of September the nine 24-pounders in the left section of No. 2 Battery opened with terrific effect on the

¹ The sites of this battery, 400 yds. to the E. of the foot of the slope of the Ridge below the Mutiny Memorial, will be found inside the Police Lines, and behind a house to the N. of these.

² The two right guns of the left section of No. 2 battery were commanded by Lord Roberts.

¹ This was known as the Sammy House Battery, and lies 400 yds. E. of the Mutiny Memorial.

Kashmir Bastion. The enemy replied, and severely wounded the commandant of the heavy guns, but their fire was soon silenced by No. 2 Battery, aided by the mortars in the Kudsia Bagh. Then the walls of Delhi began to fall, and whole yards of parapet came down. At 11 A.M. on the 12th No. 3 Battery unmasked and pounded the Water Bastion into ruins. All through the 12th and 13th the roar of fifty heavy guns was heard day and night, without intermission. On the 13th Alexander Taylor, of whom Nicholson said, "If I survive to-morrow I will let all the world know that Aleck Taylor took Delhi," announced that the breaches were practicable.

The arrangements for storming Delhi were forthwith made. The 1st column, under Nicholson, consisted of 300 men of the 75th Foot, 250 of the 1st Bengal Fusiliers, and 450 of the 2nd Punjab Infantry. It was to storm the breach in the curtain near the Kashmir Bastion. The 2nd column, under Brigadier Jones, C.B., was to storm the breach at the Water Bastion, and it consisted of 250 men of the 8th Foot, 250 of the 2nd Bengal Fusiliers, and 350 of the 4th Sikhs. The 3rd column, under Colonel Campbell, of the 52nd, was to assault the Kashmir Gate, and consisted of 200 men of the 52nd Foot, 250 of the Kumaon Battalion of Gurkhas, and 500 of the 1st Punjab Infantry. The 4th column, under Major Charles Reid, who so long and gallantly held the post at Hindu Rao's house, was to enter the city by the Lahore Gate. It consisted of 860 men of the Sirmur Battalion of Gurkhas, the Guides, and other corps, together with 1200 of the Kashmir Contingent. The 5th column, the Reserve, was commanded by Brigadier Longfield, and consisted of 200 of the 60th Rifles (who joined after the

assault), 250 of the 61st Foot, 450 of the 1st Punjab Infantry, 300 of the Baluch Battalion, and 300 of the Jind Contingent. Besides these five columns, Colonel Hope Grant, with 600 sabres of the 9th Lancers and Sikh Horse, whose duty it was to prevent sallies from the Lahore and Kabul Gates, were for long under heavy fire.

On the night of the 13th Lieutenants Medley and Lang explored the Kashmir breach, and Lieutenants Greathed and Home that of the Water Bastion. The morning of the 14th was fine and still. Nicholson laid his arm on Brigadier Jones's shoulder, and asked him if he was ready. He then rejoined his own column, gave the order to storm, and immediately the heavy guns, which were roaring at their loudest, became silent. The Rifles sounded the advance, and the 1st and 2nd columns ascended the glacis. The fire of the enemy was terrible, and the Engineers Greathed and Ovenden were the first to fall. The stormers, carrying the ladders, were led by Captain Baines and Lieutenant Metje. When Baines reached the Water Bastion he had only twenty-five men left out of seventy-five. Both he and Metje were carried disabled to the rear. The 1st column was divided into two sections. Nicholson himself led one, and Colonel Herbert of the 75th the other. Nicholson was the first to mount the wall. In the other section Lieutenant Fitzgerald, who was the first to ascend, was shot dead. Another took his place, and soon both sections of the 1st column had carried the breach near the Kashmir Bastion, and taken up their position at the Main Guard. The 2nd column entered by the breach at the Water Bastion, and joined the 1st column at the Quarter Guard. Both columns then proceeded along the inner side of the city wall to the Mori or Shah Bastion at the

N.W. angle, where the rebel gunners fought gallantly and were bayoneted at their guns. The Kabul Gate, on which a soldier of the 61st planted a flag, was next taken. As the enemy kept up a galling fire from the Lahore Gate, Nicholson collected a number of men to storm it. During the advance he found himself in a long narrow lane lined with marksmen on both sides. Some of the enemy's guns were brought to bear on the attacking column, and the men fell fast. Major Jacob, of the 1st Fusiliers, received his death-wound, Captain Greville and Lieutenant Speke were struck down. The column wavered; Nicholson rushed forward, his lofty stature rendered him conspicuous, and in a moment he was shot through the body. In spite of his remonstrances he was carried to the rear, and the columns fell back to the Kabul Gate. He died of his wound ten days later.

The 3rd column had been appointed to enter the city through the Kashmir Gate, which was to be blown open by Lieutenants Home and Salkeld, Sergeants Carmichael and Smith and Corporal Burgess.¹ Home, with Bugler Hawthorne, was first down into the ditch. He planted his bag, but as Carmichael advanced with his, he was mortally wounded. Smith then advanced, and placing his dying comrade's bag as well as his own, prepared the fuses for ignition. Salkeld was ready with a slow match, but as he was lighting it he was shot through the leg and arm, and, falling, called on Burgess to take the match. Smith was in the act of giving him a box of lucifers when Burgess also fell with a bullet through his body. Smith was now alone, but he had struck a

light, and was applying it when a portfire went off in his face. There was a thick smoke and dust, then a roar and a crash, as Smith scrambled into the ditch. There he placed his hand on Home, who said he was unhurt, and having joined the column, went forward. The gate, although shattered, was not so destroyed as had been anticipated; but Home ordered Hawthorne to sound the regimental call of the 52nd, which he repeated three times, and the 3rd column passed through. Smith then obtained stretchers, and had Burgess and Salkeld carried to the camp; but both of them died—Burgess on the way, and Salkeld a month later.¹ The story of Salkeld, mortally wounded, handing over the portfire and bidding his comrade light the train, will always stand out among the many heroic episodes connected with the storm of Delhi.

The 3rd column, which was immediately joined by the reserve, pushed across the Queen's Garden and Chandni Chauk to the Kotwali, under the guidance of Sir T. T. Metcalfe, and then down the Dariba to the Jami Masjid. This, however, was strongly defended and held, and as the column was without guns or means of blowing in the gates, it was compelled to fall back when the advance on the Lahore Gate failed. In spite of the losses of the assault (66 officers and 1100 men), the British force maintained itself in the N.W. corner of the city, as far S. as the College, and, in spite of regrettable excesses on the part of the troops,

¹ Home, Smith and Hawthorne received the Victoria Cross. Lieut. Philip Salkeld died of his wounds on 11th October 1857; Lieut. Duncan Charles Home was killed by an explosion at Malagarh on 29th September 1857; Sergt. John Smith died at Jalandhar in 1864; and Bugler Robert Hawthorne, of the 52nd Light Infantry, died at Manchester in 1879. Nor must mention be omitted of Havildars Madhu and Tilak Singh of the Bengal Sappers and Miners, who were wounded, and Sepoy Ram Nath, who was killed.

¹ The real name of this gallant man, who had enlisted as Frank Burgess, was Joshua Burgess Grierson.

gradually captured the whole city. On the 16th the Magazine was taken, and posts were established from it to the Kabul Gate during the 17th and 18th, the troops working from house to house under cover. On the 19th the Burn Bastion, between the Kabul and Lahore Gates, was seized, and on the next morning the Lahore Gate was captured, and cavalry, entering by the Delhi Gate on the S., occupied the Jami Masjid. On the 20th the Fort and Palace were taken, very little opposition being offered by the few rebels left in it. On the 21st the King was captured by Major Hodson at Humayun's tomb, and on the following day, Hodson received the surrender of the King's sons at the same place, and shot them in front of the Delhi Gate. On 24th September a column under Colonel Greathed marched S. from Delhi, and on 10th October relieved Agra (p. 268); on the day that it left Brigadier-General Nicholson was buried in the Kashmir Gate Cemetery.

The number of troops engaged on the Siege of Delhi from first to last was 9866, of which no less than 3837 were killed or died of wounds or were wounded. These included 46 European officers killed and 140 wounded. Three out of the four officers who commanded the assaulting columns were disabled. The 1st Bengal Europeans lost nine officers; and the total cost of the storm was 1104 men and 66 officers, or about two out of every nine, killed and wounded. No more marked display of endurance and steady courage than that shown by the Delhi Field Force during the summer of 1857 can be found in the whole splendid record of the British and Indian armies.

Delhi and its Surroundings.

For the convenience of sight-seeing, Delhi and the adjoining country may be divided as follows :

(1) The city, including the old Magazine, the Fort and Palace, the Jami Masjid and Kalan Masjid, and the Chandni Chauk.

(2) The tract lying N. of the city walls, with which the principal incidents of the Siege of Delhi and the Imperial Assemblages are concerned.

(3) The tract lying immediately S. of the city, and including the ruins of Firozabad, the Purana Kila, the Mausolea of the Emperor Humayun and Nawab Safdar Jang, and Nizam-ud-din Aulia, the Saiyad and Lodi tombs, and Jai Singh's Observatory.

(4) The tract lying still farther S., including the tomb of the Emperor Firoz Shah at Hauz Khas, Siri, Jahanpanah, Kila Rai Pithora, the citadel of Lal Kot, with the Kutb Minar and Mosque, and Tughlakabad, 5 m. to the E. of these.

(5) The sites and buildings of the new capital, included in (3).

(1) The City.

On the outer face of the **Kashmir Gate** is a memorial tablet of the Explosion Party. The first was erected by Lord Napier of Magdala, the present one by Lord Minto in 1910. On the inside the outlines of the **Quarter Guard**, in which so many European officers were murdered on the 11th May 1857, are still traceable; on the N. side a staircase leads on to the walls just above the main breach, and from here and from the adjoining bastion a fine view is had of the vistas cut to the points where No. 1 and No. 2 **Siege Batteries** were established. E. of the **Quarter Guard** are the **District Courts** and the second breach at the side of the **Water Bastion**.

In front of the Gate is **St James' Church**, built by Colonel Skinner, C.B., whose Delhi residence stood on the opposite side of the clear space here; in the churchyard are

the old dome-cross bearing the marks of bullets fired at it in 1857, a memorial cross to the victims of the Mutiny, and the graves of the Skinner family and of Mr William Fraser, murdered in 1835, and of Sir T. Metcalfe; and inside the church are a number of memorial tablets. 200 yds. S. of the gate is the Cambridge Mission College on the right, and 200 yds. farther, upon the left, the High School building, once the Delhi College, and before that the Residency. Its occupation as a Residency dates from the time of Sir D. Ochterlony: a portion of the building was formerly the library of Prince Dara Shikoh. The road now divides into two branches with a long grass plot in the centre. At one end of the latter is the granite memorial of the officers of the Telegraph Department who fell in 1857. Further along the same plot and opposite the Post Office stand the gateways of the old **Magazine**. Over the central gate of the Magazine is a memorial of Lieutenant Willoughby and the eight heroic men¹ who shared in its defence; in the S.E. corner at the back may still be seen the steps by which the survivors escaped to the Kashmir Gate. The road now passes the oldest cemetery in Delhi on the left; and beyond the arch of the railway bridge the main thoroughfare (which branches to the railway station on the right, and on the left to the ghats and the Jumna bridge) ascends the slope in front to the **Mughal Fort and Palace**, built by the Emperor Shah Jahan between 1639-48.

There are two fine gates to the

¹ Conductors John Scully and G. D. Shaw, Sub-Condr. W. Crowe, and Sergts. Benjamin Edwards and Peter Stewart were killed by the explosion; Lieut. G. D. Willoughby was murdered on 13th May while making his escape from Delhi. Lieut. George Forrest, V.C., the father of Sir George Forrest, the historian, died in 1859, and Lieut. W. Raynor, V.C., in 1860. The last survivor of "The Devoted Nine" was Conductor John Buckley, V.C., who died in England in 1876.

Fort, as at Agra. The one in the centre of the W. side and facing the E. end of the Chandni Chauk is called the Lahore Gate, and the other at the W. corner of the S. side, is named the Delhi Gate. A fine view of the magnificent red sandstone wall (whence the name Lal Kila or Red Fort) is obtained by walking along the ditch to the N.W. corner, where the three bridges between the Fort and the Salimgarh may be seen, and the traditional site of the Dasaswamedh and Nigambodh ghats, where the Imperial Horse sacrifice was performed by Yudhishthir (Introd. p. lxiii), and the sacred Vedas were recovered from the bottom of the ocean.

Entering the forework erected by the Emperor Aurangzeb in front of the **Lahore Gate**, and passing under its grand archway, the visitor will find himself under a vaulted arcade (see plan of Fort and Palace), which Fergusson (*Ind. Arch.*, 2, 309) considers to be the noblest entrance to any palace. From the octagon in the centre of it a gateway to the left conducts to the steps leading up to the rooms (now private quarters) over the Lahore Gate. At the foot of these, on the 11th May 1857, was killed the Commissioner of the Division, and in the rooms above were murdered the wounded Collector and Commandant, the Chaplain, and two ladies. The vaulted arcade ends in the centre of the outer court, which measured 540 ft. by 360 ft., of which the side arcades and central tank have been removed; round the edge of the tank were murdered, on 16th June 1857, some fifty Christians who had escaped the massacre of the 11th. In the E. wall of the court was the now isolated Naubat or **Nakkar Khana**, the band gallery of which is 100 ft. by 80 ft.; and here every one except Princes of the royal blood was required to dismount. The

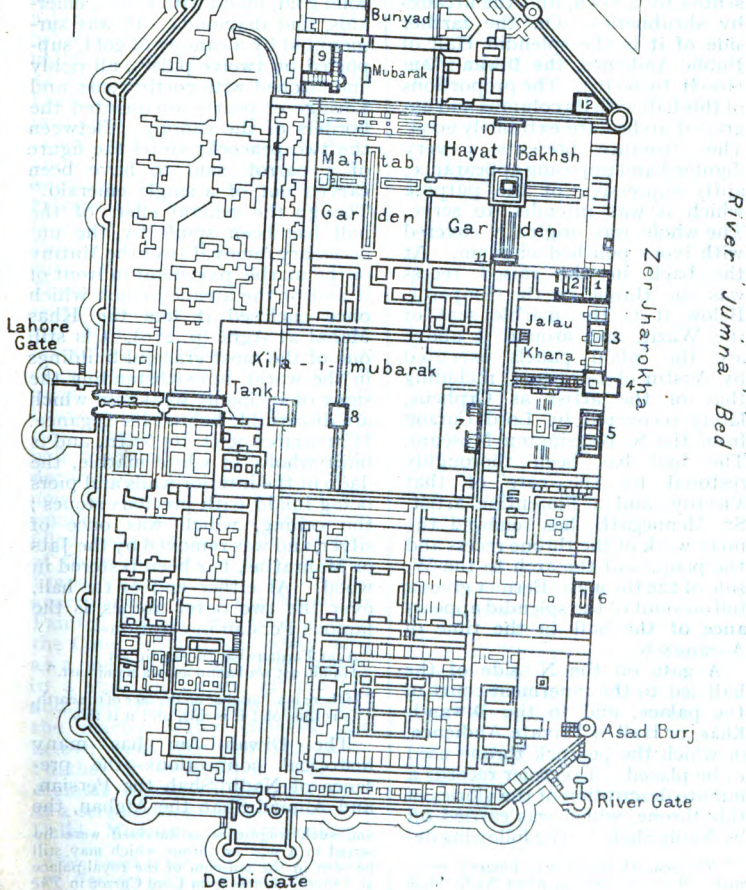
Plan of the PALACE OF DELHI before 1857

Scale of Feet

0 400 800

N

- 1 Hammam or Baths
- 2 Moti Masjid
- 3 Diwan-i-Khas
- 4 Tasbih Khana & Musamman Burj with river wicket & steps to this below it.
- 5 Rang Mahal
- 6 Mumtaz Mahal
- 7 Diwan-i-Am
- 8 Nakkar Khana
- 9 Baoli Well
- 10 Bhadon Pavilion
- 11 Sawan Pavilion
- 12 Shah Burj Pavilion
- 13 Vaulted Entrance Arcade



carving of the flowers on the red sandstone dado of the gateway is unusually good. The inner main court to which this gateway led was 540 ft. broad and 420 ft. deep, and was also surrounded by arcade galleries, where the great feudatories used to mount guard. This space has been recently cleared of the modern military structures which so long defaced it, the courtyard being now represented by a lawn, and the arcades by shrubberies. On the farther side of it is the splendid Hall of Public Audience, the *Diwan-i-'Am* (100 ft. by 60 ft.). The proportions of this hall with its columns and engraved arches are extremely good. The structure presents a very dignified and imposing appearance, aptly expressive of the purpose which it was intended to serve. The whole was originally covered with ivory polished chunam. At the back in the raised recess was the throne of the Emperor. Below it is the marble seat of the Wazir, and around it above are the inlaid panels executed by Austin of Bordeaux, including that of the artist as Orpheus, lately recovered by Lord Curzon from the S. Kensington Museum. The hall has been thoroughly restored by the care of that Viceroy, and a Florentine artist, Sr. Mennegatti, has renewed the inlay work of the throne recess and the plaques of the arch to the W. side of the throne. Bernier gives a full account of the splendid appearance of the hall in the time of Aurangzeb.

A gate on the N. side of the hall led to the innermost court of the palace, and to the *Diwan-i-Khas*, or Hall of Private Audience, in which the peacock throne used to be placed. Tavernier records a minute description of the glories of this throne, which was carried off by Nadir Shah.¹ The following de-

scription is from Mr Beresford's *Guide to Delhi*: "It was so called from its having the figures of two peacocks standing behind it, their tails being expanded, and the whole so inlaid with sapphires, rubies, emeralds, pearls, and other precious stones of appropriate colours, as to represent life. The throne itself was 6 ft. long by 4 ft. broad; it stood on six massive feet, which, with the body, were of solid gold, inlaid with rubies, emeralds, and diamonds. It was surmounted by a canopy of gold, supported by twelve pillars, all richly emblazoned with costly gems, and a fringe of pearls ornamented the borders of the canopy. Between the two peacocks stood the figure of a parrot, said to have been carved out of a single emerald." Though the general effect of the hall has been spoilt by the unnecessary removal after the Mutiny of the marble pavement in front of it and of the arcaded court which once enclosed it like the *Khas Mahal* at Agra (p. 276), it is still one of the most graceful buildings in the world, notwithstanding the signs of incipient weakness which are discernible behind its elegance. It measures 90 ft. by 67 ft., and is built wholly of white marble, the dado of the interior walls and piers being inlaid with precious stones; the ceiling, which was once of silver, and was removed by the Jats or Mahrattas, has been restored in wood. At either end of the hall, over the two outer arches, is the famous Persian inscription—

"Agar Fardaus bar ru-i-zamin ast
Hamin ast wa hamin ast wa hamin ast."

"If there is a Paradise on the face of the earth,
It is this, oh! it is this, oh! it is this."

The *Diwan-i-Am* has many historical connections—the presence of Nadir Shah the Persian, and Ahmad Shah the Afghan, the

and such fragments as survived were inserted in a seat or throne which may still be seen in the museum of the royal palace at Teheran (letter from Lord Curzon in *The Times* of 10th September 1919).

¹ The peacock throne is no longer in existence. It was broken up when Nadir Shah was murdered in North-east Persia in 1747,

blinding of the Emperor Shah Alam by the brutal Ghulam Kadir, the reception of Lord Lake after the Battle of Delhi in 1803, the thanksgiving service of the Delhi Field Force on the 27th September 1857, the trial of the last King of Delhi in January and March 1858, the ball given to H.R.H. the Prince of Wales by the Indian army in January 1876, and that on 6th January 1903, in honour of the coronation of the late King Edward VII. In the river-bed below the hall and the connected buildings was the space known as Zer-Jharokha, or Beneath the Lattices. It was here that the mutinous troopers from Meerut called upon the King on 11th May, and it was from the terrace above, between the hall and the **Royal Private Apartments**, that Captain Douglas, the Commandant of the Palace Guard, ordered them to withdraw to the South of the city. These apartments consist of three sets of rooms and of a tower called the Musamman (octagon) Burj, projecting over the river. In the open central bay is a fine alabaster panel with a representation of the heavens round the Scales of Justice, Mizan-i-adl, and in others will be found the most beautiful decorations and pierced grilles now left in Delhi. Two of the smaller rooms have lately been filled with articles representative of those in daily use by Mughal Emperors and nobles. S. of these apartments is the **Rang Mahal**, or Painted Palace, the residence of the Chief Sultana, till lately used as a mess-house, and now placed in a state of repair, all modern additions having been removed; the marble water channel (see below) runs through this also. Farther S. is another hall, the **Mumtaz Mahal**, till recently used as a sergeants' mess, and now the Delhi Museum of Archæology.¹

¹ See *Guide to the Delhi Fort Buildings and Gardens* (Archæological Survey of India), by E. Gordon Sanderson, 1914, and

It contains some Mutiny relics, views and plans of Delhi in former times, and an excellent collection of Mughal miniature portraits. On the N. side of the Diwan-i-Khas, and connected by a shallow water channel, which also passed through the Royal Apartments, are the **Royal Baths**. These consist of three large rooms, the flooring elaborately inlaid with *pietra-dura* work, and crowned with domes, unhappily whitewashed. They were lighted by windows of coloured glass in the roof. In the centre of each room is a fountain, and in the wall of one of them a reservoir of marble.

Opposite to them, to the W., is the **Moti Masjid**, or the "Pearl Mosque," of white and grey-veined marble. A bronze door covered with designs in low relief leads to the courtyard, 40 ft. by 35 ft. The mosque proper has three arches, and is divided into two aisles. The walls are decorated with low reliefs. It was built in 1659 A.D. by Aurangzeb, and cost Rs. 160,000. Certain details in the decoration show that the elegance of Mughal work of this period was already beginning to degenerate into weak floridness. The work was damaged during the Mutiny: originally, the domes were covered with gilded copper plates.

To the N. of these buildings lies the fine **Hayat Bakhsh**, or Life-giving garden-court, 200 ft. square, of which till lately only the Shah Burj pavilion in the N.E. corner and the Bhadon and Sawan Pavilions on the N. and S. sides remained. The tank and

Catalogue of the Delhi Museum of Archaeology, 1913, by the same author. Both can be obtained from the Caretaker at the Fort. See also, *Catalogue of the Collection of Coins illustrative of the History of the Rulers of Delhi up to 1858 A.D.*, in the *Delhi Museum of Archaeology*, by R. H. Whitehead, I.C.S., Calcutta, 1910; and *Astronomical Instruments in the Delhi Museum*, by G. R. Kaye, Calcutta, 1921.

water channels have been restored as far as possible, and all modern unsightly excrescences have been removed through the influence of Lord Curzon. Beyond these the road to the N. leads to the Salimgarh, built by Salim Shah in A.D. 1546; except for the view over the river, this outwork scarcely deserves a visit. W. of the above garden was another called the Mahtab (moon) Bagh, and near what was the N.W. corner of it is a picturesque baoli or tank. Nothing else remains of the courts and beautiful buildings of the old palace which were so barbarously and unnecessarily removed after 1857.

The road from the baoli leads due S. to the **Delhi Gate** of the Fort, which is inferior to the Lahore Gate; near it, on the right, the King of Delhi was imprisoned after September 1857. Between the inner and outer gates stand two large stone elephants (p. 156), without riders, replaced here through the generosity of Lord Curzon. Beyond the Southern glacis of the Fort, on which a cross marks the site of the old cemetery, are the gardens of the old Cantonment of Dariaganj. This area is not now occupied by troops. The Dariaganj area is bounded on the W. by the Faiz Bazar leading to the Delhi Gate; over the Khairati Gate in the N.E. corner is the **Zinat-ul-Masajid Mosque**, built by a daughter of Aurangzeb in 1710. The house in the Cantonment numbered 5, just beyond the road to the gate, was defended for 48 hours after 11th May 1857 by a party of Europeans, of whom only two escaped finally.

From the Delhi Gate of the Fort the Khas Bazar once led to the **Jami Masjid**, and on the open space now on this side stood a number of the principal private palaces. In the Southern portion of this open space and to the left front of the Jami Masjid is the

King Edward Memorial Garden, in the centre of which an equestrian statue of the late King Edward VII. is placed. To the S. are the School of the Baptist Mission, and the Empress Victoria Memorial Hospital for women, and to the W. of it are the Jami Masjid and Dufferin Municipal Hospital. On the left of the road and in front of the Delhi Gate is the graceful **Sonehri Masjid** of Javed Khan, built in 1751.

Fergusson wrote¹ of the **Jami Masjid** as follows: "The Jami Masjid at Delhi, begun in 1644, but not finally completed till 1658, is not unlike the Moti Masjid in the Agra Fort in plan, though built on a very much larger scale, and adorned with two noble minarets, which are wanting in the Agra example; while from the somewhat capricious admixture of red sandstone with white marble it is far from possessing the same elegance and purity of effect. It is, however, one of the few mosques, either in India or elsewhere, that is designed to produce a pleasing effect externally. It is raised on a lofty basement, and its three gateways, combined with the four angle towers and the frontispiece and domes of the mosque itself, make up a design where all the parts are pleasingly subordinated to one another, but at the same time produce a whole of great variety and elegance. The mosque itself is 201 ft. in height by 120 ft., and is flanked by two minars 130 ft. high, formed in alternate vertical stripes of sandstone and white marble, and crowned by light marble pavilions. Its principal gateway cannot be compared with that at Fatehpur-Sikri; but it is a noble portal, and from its smaller dimensions more in harmony with the objects by which it is surrounded." The three noble gateways are approached by grand flights of steps, unrivalled

¹ *Ind. Arch.*, 2, 318.

elsewhere, except at Fatehpur-Sikri. As of old, the great doors of the main gateway on the E. were opened only for the Mughal Emperor, so now they are opened only for the Viceroy of India and the Governor of the Punjab, but other visitors can enter from this side by the wicket in the doors. These are massive and overlaid with brass arabesques half an inch thick. Inside them is the stately quadrangle, 325 ft. square, in the centre of which are a marble basin and fountain. Round three sides of the quadrangle runs an open sandstone cloister, 15 ft. wide, with pillars of the same material. The mosque proper is 200 ft. long and 90 ft. broad. The inscription on the front gives the date in Arabic as 1658 A.D., the year in which Aurangzeb deposed his father, Shah Jahan; it is found in the single word "Ya Hadi," "Ah the Guide," on the centre panel. Visitors entering any part of the floor space of the mosque are required to wrap their boots in covers provided there. The three white marble domes are relieved by thin vertical lines of black marble. The two minarets rise to the height of 130 ft. They are reached from the S. gate over the roof of the arcade. At the N.E. corner of the court is a pavilion in which are placed relics of the Prophet Muhammad. The view of the Fort walls from the galleries on the E. side of the court is very fine; and that of the outside of the back wall of the mosque from the W. is most impressive.

From the Jami Masjid the Chaura Bazar leads S.W. to the Kazi Hauz and the Lal Kua Bazar, which is the principal thoroughfare of the S.W. side of the city, and extends up to the Fatehpuri Masjid. S. from the Kazi Hauz one main street runs past the Kalan Masjid to the Turkoman Gate, and another con-

tinues W. to the Ajmer Gate and the mausoleum of Ghazi-ud-din Khan outside it. The Kalan (Great) Masjid, popularly known as the Kala (Black) Masjid, was once included within the limits of Firozabad, and was built by the Emperor Firoz Shah in 1386. The outside consists of two storeys, of which the lower, forming a kind of plinth to the actual place of worship, is 28 ft. high, the total height to the top of the battlements being 66 ft. The walls, which are very thick, have in the upper storey a number of openings, filled with red stone screens, now much mutilated; the arcades are supported by plain square columns of stone. There is a stern look about this sombre building, the plan of which, Bishop Heber says, "is exactly that of the original Arabian mosques—a square court surrounded by a cloister, and roofed with many small domes of the plainest and most solid construction." To the E. of the mosque is the tomb of Turkman Shah, who was styled the "Sun of Devotees." He died in 638 A.H. = 1240 A.D., in the time of Muizz-ud-din Bahram Shah, and his grave is therefore one of the oldest of those near modern Delhi. Near the Turkoman Gate is the S.P.G. Church of the Holy Trinity, built in 1904.

A little to the N. of this saint's grave in the Bulbuli Khana is the tomb of Sultan Raziya, daughter of the Emperor Altamsh, and the only Muhammadan Queen-Empress of India, who ruled from 1236 to 1240; she was killed in flight from a battle in which she sought to recover her throne. The mausoleum at the Ajmer Gate is enclosed in a modern horn-work (1803). It was constructed by Ghazi-ud-din Khan, who was interred there in 1710. He was the father of the first Nizam of Hyderabad, whose son, Ghazi-ud-din, is also buried here, and whose grandson, Ghazi-

ud-din (Imad-ul-Mulk), played a prominent part in the saddest events connected with the fall of the Mughal empire. In addition to the graves standing in a small enclosure surrounded by panels of pale-coloured sandstone, some pierced and some carved with flowers, there are a mosque and a college, the latter now occupied by the Anglo-Arabic School. The wooden doors in the Ajmer Gateway are interesting as being similar to those of the Kashmir Gate, blown in on 14th September 1857.

Close to the Jami Masjid, on the N.W. side, is a Jain Temple, approached by narrow streets. It stands upon a high, walled platform, gained by narrow steps, and consists of a small marble court surrounded by a stucco colonnade, in front of the temple proper, which is surmounted by an oblong dome. Within the ceiling and walls are richly gilded, and are supported by two rows of small marble columns. In the centre of the temple is a pyramidal platform in three tiers, upon which rests the small figure of a Jain saint, seated beneath an elaborate ivory canopy. Fergusson¹ draws particular attention to the exquisite device in the porch of filling in the back of the struts which support the architrave beneath the dome with foliated tracery. To the N. the Dariba passes the Dufferin Hospital on the right, and leads to the Chandni Chauk. The portion of that famous street between this point and the Fort was called the Urdu, or Camp.² On the N. side of it is a large residence, which formerly belonged to the Begam Samru, and is now occupied by the Imperial Bank of India. On

the roof of an outhouse attached to the building, Mr Beresford, the manager of the Delhi Bank, desperately defended himself and his family on 11th May 1857. W. of the Dariba came the Flower Market and the Jewellers' Market in the main street, and then the Chandni Chauk proper, which has swallowed up all the other names. Houses were built both across it and down it during the last years of Mughal rule; they were all removed early last century, and the branch of the W. Jumna Canal running down was closed over after the Mutiny. Opposite a fountain and the S.E. gate of the Queen's Gardens is the Kotwali, where many executions took place after September 1857, and on the W. side of the open space in front of it is the Sonehri Masjid of Roshan-ud-daula, on the platform of which Nadir Shah sat in stony silence while the inhabitants of Delhi were being massacred by his troops. On the left-hand side of the Kotwali is the Siganj Gurdwara, a sacred place of the Sikhs, erected to mark the traditional site of the martyrdom of their guru Tegh Bahadur, by order of Aurangzeb. Further down, on the same side of the Chandni Chauk, is the Khuni Darwaza, or Gate of Blood, where the massacre by Nadir Shah is said to have terminated. Opposite the Kotwali, in the centre of the square, erected on the site of the famous Karawan Sarai, built by Jahanara Begam, daughter of the Emperor Shah Jahan, and held by Bernier to be one of the wonders of Delhi, rises the Northbrook Clock Tower; while on the N. side of the street, between it and the Municipal Buildings, is the Statue of Queen Victoria, presented to his fellow-citizens by Mr James Skinner, grandson of the famous Colonel Skinner, C.B., as a memorial of her late Majesty. Behind the Municipal Buildings, and facing the main railway station, are the Begam or Queen's Gardens, much

¹ *Indian Architecture*, 2, 66.

² The mixed language which grew up in the royal residence (*urdu-i-mahalla*, the sublime camp) was called *zaban-i-urdu*, the camp language, and became gradually known as Urdu.

frequented both by travellers by the railway and by townspeople. In the gardens is situated the new Public Library, erected in memory of the Viceroyalty of Lord Hardinge. The Chandni Chauk proper ends at the **Fatehpuri Mosque** constructed by the Begam of Shah Jahan in 1650; it is built of red sandstone, and is surmounted by a single dome. On the S. side of the mosque a street leads to the **Lal Kua Bazar**, and on the N. side another leads to the **Lahore Gate** and the smaller **Sarhandi Mosque**, erected by another wife of the Emperor, in front of it. Beyond the channel which formerly connected the Western Jumna Canal with the Agra Canal at Okhla (but has now been abandoned), are the quarters of Paharipur and Kishanganj (p. 292). To the S., on the crest of the Ridge, is the **Idgah**, seen so clearly from the Mutiny monument; and to the S.W., at the foot of the Ridge, is the picturesque enclosure of the **Kadam Sharif**, or Sacred Foot, in which Prince Fateh Khan, eldest son of the Emperor Firoz Shah, was buried in 1373. The name is derived from the imprint of the feet of the Prophet Muhammad carved on a small slab preserved at the tomb. The road running from the front of the Fatehpuri Masjid past the W. end of the Queen's Gardens and the Cambridge Mission Church leads to the main road coming past the N. side of the gardens to the Kabul Gate. On the left side of the road, in a large house which once belonged to Nawab Safdar Jang, the **Cambridge Mission** is located. Besides the College and School under this mission, there is a large female Hospital at Tis Hazari, below the S. point of the Ridge. The lady workers of the Mission and the members of the Baptist Mission reside in the Civil Station. Farther on, just before arriving at the site of the **Kabul Gate**, now removed, a piece of the old wall has

been left to mark the spot where **Brigadier-General Nicholson** was mortally wounded in pushing towards the Lahore Gate on 14th September 1857. The main portion of the wall was demolished to make way for the Burn Bastion Road.

(2) Tract lying N. of the City.

The Dufferin Bridge, crossing the railway from the above road, leads to the Mori Gate and the Civil Station. Outside the Mori Gate is a statue of General Sir Alexander Taylor (1826-1912) of the Bengal Engineers (see p. 295). The **Mori** or **Shah Bastion**, 200 yards to the W. of the gate, affords a fine view of the S. end of the Ridge and of the N. wall front down to the Kashmir Gate. The present walls of Delhi were built by Shah Jahan, but the towers and larger bastions were constructed by the British after the attack of the city by Jaswant Rao Holkar in October 1805. The repulse of 70,000 Mahrattas, with 130 guns, by Colonel Burn, with two and a half battalions of sepoys and two corps of irregular cavalry, was a most notable feat of arms, though now forgotten, like the Battle of Delhi in 1803 (p. 290). On the right, just outside the Kashmir Gate, is the **Kudsia Garden**, and on the left the Nicholson Garden, with the statue of General Nicholson by Sir T. Brock, R.A. He is buried in the cemetery N. of it. The grave is 50 yds. to the right of the entrance, and bears the brief, soldierly inscription—

The Grave of
Brigadier-General JOHN NICHOLSON,
Who led the assault of Delhi, but fell
In the hour of victory
Mortally wounded,
And died 23rd of September 1857,
Aged 35 years.

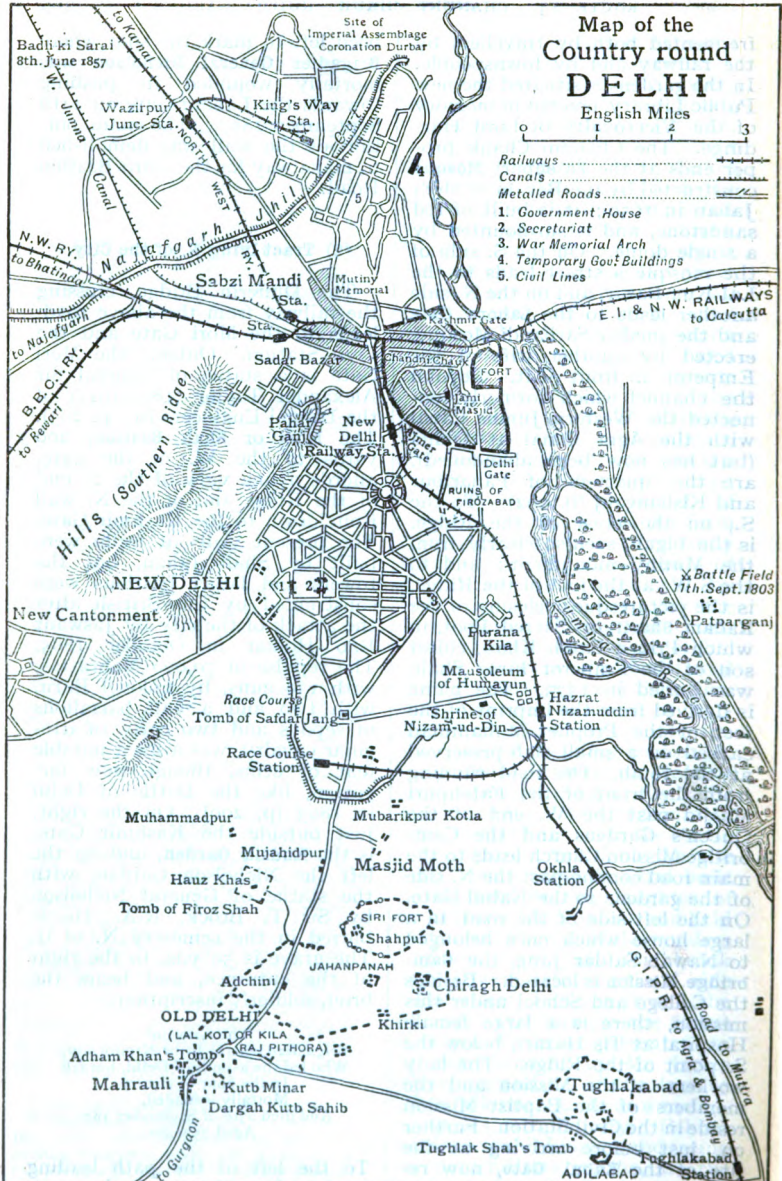
To the left of the path leading straight from the gate is the grave

Map of the Country round DELHI

English Miles

0 1 2 3

- Railways
Canals
Metalled Roads
1. Government House
2. Secretariat
3. War Memorial Arch
4. Temporary Govt. Buildings
5. Civil Lines



of Mr Hervey Greathed, Political Officer with the Force before Delhi, who died of cholera four days after the assault. Just beyond the back (W.) wall of the cemetery is the right section of **No. 2 Siege Battery**. Passing, in the Kudsia Garden, the **Flagstaff** which bore the Royal Standard at the Coronation Darbar of 1st January 1903, the site of **No. 3 Battery** will be found to the S. of the mosque there, which formed part of the old Kudsia Palace, a fine building, which apparently disappeared early in the 19th century, and the Mortar Battery to the left of the N. entrance of the Gardens from the Alipur Road. Just beyond this, on the opposite side, is Ludlow Castle, the residence of Mr Simon Fraser in 1857, and now the Delhi Club, with the left section of **No. 2 Battery** in the grounds close to the wall of the main road. Passing the offices of the W. Jumna Canal and Maiden's Hotel, the temporary residence of the Commander-in-Chief, with a sentry at the gate, will be seen on the left hand. Close behind was the **Telegraph Office** in 1857, of which the staff remained on the spot till late in the afternoon of 11th May, and of which one member returned still later with an officer to send an official message to Ambala. It was the irresponsible talk of the office clerks along the line which really conveyed the news of the mutinies of Meerut and Delhi to Ambala, and so to Lahore, and enabled steps to be taken to check worse mischief in the Punjab. A quarter of a mile farther on, across a small drainage ravine from the Ridge, is a high mound, on the crest of which defensive works are still discernible. This was the **Mound Picket**, and **Metcalf House**, which formed the extreme left of our position before Delhi, lies 500 yds. E. of it, on the bank of the Jumna. The house, built by Sir T. Metcalfe between 1830 and 1840, was destroyed at the Mutiny.

Its ruins were acquired by Government in 1911, and the building was restored for use as a residence for various officials and members of the Legislature. A little further on are the temporary Secretariat buildings, which are now occupied by Army Headquarters, pending transfer to New Delhi, and also by the Postal and Telegraph Audit Department, which will be permanently located there. The old Assembly Chamber, in the centre of the block, serves as a Convocation Hall for the Delhi University, which was established by statute in 1922 as a teaching and residential University. The three Colleges—St Stephen's, Hindu, and Ramjas—which are affiliated to it—continue in their former buildings, but no central building has yet been erected. It has been suggested that when the Viceroy moves to New Delhi, the Circuit House (see below) shall be utilised for the purpose. The road now proceeds N. for $\frac{3}{4}$ m., and then turns W. through the Ridge, the Northernmost outcrop of the Aravallis, the Ridge Road to the left leading past the grave of some of the officers of the 54th, murdered on 11th May 1857, to the **Flagstaff Tower**, to which another steeper road leads direct from the S. From the Tower a complete view is obtained of the whole position before Delhi and of the encampment of the British Force below the Ridge, the pale dome of St James' Church marking the site of the Kashmir Gate, and the square roof of a factory that of the Mori Bastion. The large house to the W. from the Flagstaff Tower is the Circuit House, built for the Viceroy at the time of the Coronation Darbar in 1903 for the Viceroy (Lord Curzon). It is now in use as a temporary Viceregal Lodge. A pleasant walk may be taken through the old Cantonment, in which the lines of an Indian cavalry regiment and residences for the officers were built not

long ago, and which the Najafgarh Canal bounds on the farther side. The area on both sides of the canal (in reality a drainage cut) was used for the main Civil Camps at the last Imperial Darbar of 1911. Near the drainage cut is the **Rajpur Cemetery** where Major-General Sir H. Barnard and so many of his brave men who fell before Delhi lie buried.¹ There is a memorial cross of grey Aberdeen granite. Beyond the canal was a battery, erected to protect the rear of our position. Four m. farther down the road is the field of the Battle of Badli-ki-sarai, fought on 8th June 1857 (p. 292). A mile to the W. of the old Mughal Sarai, of which only the two main gateways now remain, are the ruins of the glorious Shalimar Gardens of the Emperor Shah Jahan, the scene of the coronation of his usurping son, Aurangzeb. Half-way to Badli-ki-sarai, and removed some 2 m. to the N. side of the road, is the Plain of Barwari, on which the Imperial Assemblage of 1st January 1877 and the Coronation Darbar of 1st January 1903 were held, and presented scenes of splendour such as were never seen under the greatest of the Mughal Emperors. His Majesty's Coronation Darbar of 12th December 1911 was also held here. The earthwork of the amphitheatre erected for this purpose has been maintained, and the site of the thrones occupied by their Imperial Majesties marked by a granite column.

Returning to the **Flagstaff Tower** in which the ladies and children of the Cantonment were gathered all the long afternoon of 11th May 1857, and looked in vain for the troops from Meerut, and proceeding S. down the Ridge,

the old mosque of the time of Firoz Shah, known as the **Chau-burji Mosque**, is reached in half a mile. This formed the left of the British position on the Ridge, and round it traces of the breastworks may still be seen. The dark building that rises $\frac{1}{2}$ m. farther S. is the so-called **Observatory**, most probably a portion of Firoz Shah's **Shikargarh**, or hunting - lodge, known generally as the **Pir Ghaib**; to the E. of it the earthworks of a battery are still visible, and just beyond it is **Hindu Rao's House**, the key of the position on the Ridge which was so gallantly held by Major Reid (afterwards Sir Charles Reid, G.C.B.) with his little Gurkhas,¹ supported by the 60th Rifles and the Guides. From the N. side of this, on the edge of the reservoir of the Delhi Waterworks, a fine view is obtained of the slope from the Mori Gate up to the right of our position, to which the mutineers so often advanced. At the bottom of the slope, on the W. side, is a fine *baoli* (tank), which no doubt also belonged to the Hunting Palace of Firoz Shah, called **Kushk-i-Shikar**, and **Jahannuma**. At the bottom of the *baoli* an underground passage of considerable proportions has recently been discovered and cleared out. It leads through the Ridge to the lower ground on the N.W. The key of the passage can be obtained at the Hospital. Within the grounds of the old palace was erected the pillar or **Lat of Asoka**, 250 yds. S. of Hindu Rao's House. It was broken by an explosion early in the 18th century and lay on the ground for 150 years; the letters of the original inscription are consequently less clear than in the case of the similar pillar in

¹ This walk can be prolonged by 4 m. by walking N. through the old Cantonment to the end of the Ridge and the picturesque shrine of Shah Alam situated near Wazirabad, on the bank of a nullah spanned by an old Pathan bridge.

¹ The 2nd King Edward's own Gurkha Rifles (The Sirmur Battalion) carry a bronze truncheon, surmounted by a crown in silver, supported by three Gurkha soldiers in bronze. On a ring of silver below the figures is the inscription: "Main Picquet, Hindu Rao's House, Delhi, 1857."

the Kotila of Firoz Shah (see below). It was originally at Meerut Three hundred yards farther S. again rises on a lofty platform the ungainly **Mutiny Memorial**, occupying the site of the right batteries of our position; on the panels round the base of the memorial are records of the troops who served before Delhi, of the various actions fought by them, of our losses, and the names of the officers who fell in them. Behind it, to the W., was the Crow's Nest, over the old flooded quarry, and in front of it, to the S.E., was the Sammy House. It was at this end of the Ridge that Timur entrenched himself after crossing the Jumna in December 1399, and repulsed an attack made on him by the Minister of Mahmud Khan Tughlak. From it a fine view is obtained of the sites of the actual siege, the Sammy House Battery being in full view 400 yds. to the W., and the smashed face of the Mori Bastion 1000 yds. off, while the buildings of the Police Lines and Ludlow Castle and St James' dome indicate the position of the Siege Batteries. The Sammy House, quaintly named from the image of a deity (Swami), in the court of a monastery, was held in order to check the attacks on the right, and round it some of the severest fighting took place; the Sammy House Battery was erected 100 yds. to the N. of it. In the dip of the Ridge which occurs at this point are seen the suburbs of Paharipur and Kishanganj, and farther to the W. that of **Sabzi Mandi** (Vegetable Market), through which the enemy so often attacked the British position, and even their right rear; while full in view, on the Ridge beyond the gap, are the walls of the great **Idgah**. W. of Sabzi Mandi are the **Roshanara Gardens**, created by the daughter of Shah Jahan, who lies buried here. She died in 1671—three years before her sister, Jahanara Begam (p. 313).

(3) Tract lying immediately to the S. of the City.

A description of the portion of this tract which is covered by the New Capital is given separately from p. 322.

For the present purpose the tour will be made by starting on the E. side from the **Delhi Gate** and returning on the W. side to the **Ajmer Gate**.

Not far from the Delhi Gate were shot the rebel Princes whom Major Hodson had captured at the tomb of Humayun. About 800 yds. from the gate a fine Pathan gate of decorated stonework is passed on the left: it is known as the **Lal Darwaza**, or Red Gate, and was apparently the Northern gate of the short-lived capital of Sher Shah, which probably was left incomplete. Immediately after passing the Lal Darwaza, a road leads to the left to the **Kotila of Firoz Shah**, which formed the citadel of the city of Firozabad, founded by that Emperor (1351-1388). In the Kotila, built up on the top of a lofty platform, rises the second **Lat of Asoka**, which was brought from Topra, on the bank of the Jumna in the Ambala District, and erected here by Firoz Shah. The pillar is 10 ft. 10 in. round where it leaves the platform, and the total height is 42 ft. 7 in., of which 4 ft. 1 in. are sunk in the masonry. At 10 ft. 1 in. from the base are some Nagri inscriptions, with the date in two of them of Samwat 1581=1524 A.D. These must have been inscribed after the removal of the pillar to Delhi. Above these Nagri inscriptions is the inscription, which contains the edicts of Asoka. This dates from the middle of the 3rd century B.C. (Introd. p. lxxxi). The characters, which are in Brahmi, the parent of the modern Denanagri and other allied alphabets, are very clearly

written, but, when Firoz Shah assembled all the learned of the day to decipher the inscription, they were unable to do so. There is a second inscription, which records the victories of the Chauhan Prince Visaladeva, whose power extended from the Himalaya to the Vindhya. This record consists of two portions—the shorter one immediately above Asoka's edicts, and the longer immediately below them. Both are dated Samwat 1220 = 1163 A.D., and refer to the same Prince. The minor inscriptions are of little interest.

To the S. of the Lat is a **Mosque** now much ruined, but which must once have been a very fine one; it was surrounded by arcades and by a covered hall borne by plain stone columns like those of the Kalan Masjid in Delhi. To the S. of it again are the spacious enclosures shut in by the very lofty walls which look so imposing from the Grand Trunk Road. A considerable amount of conservation work has been done in connection with this group. The interior courtyards have been cleared of debris and grassed. The circular *baoli*, with two storeys of arches, lately revealed by excavation, is particularly worthy of notice. The ruins of **Firozabad** were extensively used for the construction of it and of the Delhi of Shah Jahan, and but little remains of that city although scattered ruins show that its area must have been larger than that of the present city. Two miles to the S., on the site of the old **Indrapat**, rise the lofty walls of the **Purana Kila**, with their graceful high gates, built by Sher Shah, or by him and Humayun. The S. gate, by which the Fort is most conveniently entered, is reached by a bridge across an old branch of the Jumna here; opposite the point where the road to it turns back N. are the Khair-ul-manazil, a Madrasa, and mosque built by

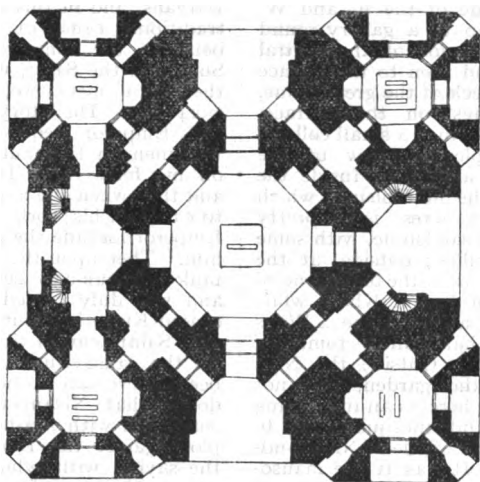
Maham Anagah, foster-mother of the Emperor Akbar and mother of Adham Khan (p. 319). To the side of this is another gate similar to the Lal Darwaza, which formed the entrance of a large market. It is worth while to ascend the gate of the Purana Kila for the sake of the splendid view to the S. The large and squalid mass of mud huts which formerly filled the whole of the Purana Kila enclosure has been cleared away and the ground levelled and grassed. Paths lead to all the gates and round the fine double cloisters inside the walls. There are an interesting *baoli* of great depth, and some underground baths near it. The road running straight on from the gate leads in 300 yds. to the **Mosque of Sher Shah**, which is one of the handsomest and most picturesque structures at Delhi; the colour of the red sandstone, the brackets under the balconies, the floral carving round the arches, and the pendentives of the domes of the interior are all worthy of special notice. A little to the S. of the mosque is a red octagonal building, called the Sher Mandal, on the steps of which, on the 24th January 1556, the Emperor Humayun slipped in rising from the evening prayer, and received injuries of which he died three days later.

Two miles farther down the Delhi-Muttra Road,¹ at a tomb with a dome of green glaze, branch roads lead to the **Mausoleum of Humayun** on the E. and to the shrine of Nizam-ud-din Aulia on the W. From the Hazrat Nizam-ud-din station, on the G.I.P. Rly. line from Delhi Central to Agra and Bombay, a road runs past Humayun's Tomb to the Tomb of Safdar Jang (p. 314).

¹ Left of the road will be seen a kos minar pillar or Mughal milestone. The kos of Akbar was a varying measure, averaging 2 m. 1000 yds.

The entrance to Humayun's tomb has been opened out and improved. The road leads first into a forecourt, on the right of which lies the entrance to the fine octagonal enclosure containing the mosque and tomb of Isa Khan, one of the best remains of the later Pathan period. It then enters the **Bu Halima Garden**, lately occupied by a squalid village, but now

to the top of the dome is 125 ft. It stands upon a high platform of red sandstone, and consists of a large central octagon surmounted by a dome with octagon towers of unequal sides at the angles. "Its plan is that afterwards adopted at the Taj, but used here without the depth and poetry of that celebrated building. It is, however, a noble tomb, and anywhere else



Scale of Feet
 10 0 20 40 60 80

Plan of the Tomb of Humayun.

restored to its former purpose. Alighting at the Eastern Gate of the Bu Halima Garden, the visitor passes into a garden forecourt to the Humayun tomb enclosure. On the right of the forecourt is the gateway of the **Arab Sarai**, built by the widow of the Emperor Humayun. Immediately in front is the noble portal of the tomb enclosure. The gate takes the form of a deep, octagonally recessed bay, — a treatment repeated in the central bay of the Mausoleum. Each side is 156 ft. long, and the height

must be considered a wonder" (Fergusson). The red sandstone of the exterior is most artistically picked out in relief with white marble. The windows are recessed, and the lower openings are filled in with beautiful lattices of stone and marble. In the centre of each side of the main octagon is a porch 40 ft. high, with a pointed arch. From the S. porch a door leads to the central octagonal chamber, with a diameter of 48 ft., in which is the cenotaph of the Emperor — it is of white

marble, and quite plain, without any inscription. The actual grave chamber can be entered by a long, dark passage in the S. face of the platform. In the N.E. corner above is the tomb of his wife, Haji Begam,¹ and among the tombs in other chambers are believed to be those of Dara Shikoh, two brothers of Bahadur Shah, and the Emperors Jahandar Shah and Alamgir II. Steps lead from the side of the E. and W. bays, first up to a gallery round the upper portion of the central chamber, and then to the terrace round the neck of the great dome. The buildings on the terrace, which once formed a small college, afford a splendid view of the country on all sides. Inside the garden of the mausoleum, which measures 13 acres, is a pretty tomb of red sandstone, with some beautiful grilles; outside, at the S.E. corner, rises the blue dome of the tomb of Fahim Khan, while half a mile away to the S.W. is the huge half-ruined tomb of **Khanan Khan**. Outside the N.E. corner of the garden, but not visible from here, is an interesting enclosure and mosque, said to have been the abode of Nizam-ud-din Aulia. It was at the mausoleum of Humayun, it will be remembered, that Major Hodson received the surrender of Bahadur Shah, ex-King of Delhi, and of two of his sons and a grandson, after the capture of the city. The garden of the tomb, and those of Isa Khan and Safdar Jung have been laid out with grass and trees. A few paces to the right are the fine tomb and mosque of **Isa Khan**, now in satisfactory surroundings; a visit should also be paid to the tomb of Khanan Khan (despoiled by a Nawab of Oudh), and the old Barapala Bridge beyond it.

The Dargah, or Shrine of Nizam-ud-din Aulia, stands on the left

side of the branch road to the W.¹ On the N. side are the Lal Mahal, or Red Palace, possibly of Ala-ud-din Khilji, and the Bara Khambe, or Twelve Columns; and on the S.E. side, in the village, a fine but ruined mosque, with four arcaded courtyards, similar to that at Khirki (p. 320), and of the date of 1372 A.D. The gateway of the shrine leads directly on to the tank, a special feature at Chishti Dargahs, and in this instance the traditional cause of the quarrel between the Emperor Tughlak Shah and the Saint, who lived to the age of ninety-two, and died in 1324 A.D. The story runs that the Emperor requisitioned the workmen on the tank for labour on his fortress at Tughlakabad, and that when the Saint arranged to carry on his work at night the Emperor forbade the sale of oil to him. Thereupon the water of the tank miraculously served as oil, and was duly cursed by the incensed King, in return for which the Saint cursed Tughlakabad. Be the cause what it may have been, there can be no reasonable doubt that Nizam-ud-din was concerned with Ala-ud-din in the plot against the Emperor; and the saying with which he comforted his disciples when told that the King was returning to punish him, and, indeed, was only a few miles distant—"Dilli hanoz dur ast" ("Delhi is still far off")—has passed into the currency of a proverb. On the right side of the tank are some tombs, and from these and from the enclosure walls men and boys dive into the water. On the left side a covered passage leads to an inner gate, and yet to another, which gives admittance to the court in which the **Tomb of the Saint** stands. This is built of white marble, and is 18 ft. sq. and surrounded by a broad ver-

¹ See the comprehensive account in "A Guide to Nizam-ud-din," by Maulavi Zafar Hasan (No. 10 of *Memoirs, Arch. Survey of India*, Calcutta, 1922).

¹ Her title was Mariam Makani.

anda; it has been restored and altered on many occasions, and there is very little of the original structure left in it now. Round the covered grave is a low marble rail, and over it is a canopy inlaid with mother-of-pearl; in the walls are fine pierced screens. To the W. of the tomb is a fine red sandstone mosque called the **Jamat Khana**, with a large central compartment and two side bays, somewhat in the style of the Alai Darwaza; and at the N. end of the enclosure is a R.H. built by the Emperor Aurangzeb. The **Jamat Khana** is a magnificent relic of the Khilji period, and it is unfortunate that it should be obscured by surrounding tombs. S. of the tomb of the Saint are, from W. to E., the grave enclosures of **Jahanara Begam**, sister of that Emperor; of **Muhammad Shah**, Emperor 1719-48; and **Prince Jahangir**, son of Akbar Shah. The grave of the Begam is open to the sky, and has grass planted in the hollow in the top of it; the inscribed headstone expresses the sentiment of this humble arrangement. This was the lady successfully treated by Dr Gabriel Boughton, who asked as his reward certain trade concessions to the English in Bengal. The other two tombs have elaborately-carved marble doors in the archways in the screens of beautiful pierced marble work which surround them. Beyond the central court is another called the **Chabutra Yarani**, or Seat of the Friends, where the Saint used to sit with his disciples; the beauty of both these courts is greatly enhanced by the fine trees in them. To the right in this enclosure is the tomb of the famous poet, **Amir Khusru**, the friend of the Saint, whom he survived a few days only. In the inscription on the walls he is termed the **Tuti-i-shakar makál**, or sweet-tongued parrot. The grave chamber is surrounded by two pierced stone

screens, and only a very subdued light reaches it.

E. of the tank, on a higher level, is the picturesque polychrome tomb, well restored, of **Azam Khan**—known also as **Atgah Khan**—who saved the life of the Emperor Humayun at the Battle of Kanauj, and was a foster-father of the Emperor Akbar. He defeated Bairam Khan when that General rebelled, and was murdered at Agra on 16th May 1562 by Adham Khan (p. 319). 200 yds. farther to the S.E. is the Hall known as the **Chausath Khambe**, or Sixty-four Pillars, which forms the family vault of the sons and brothers of Azam Khan, who were known as the **Atgah Khail**, or **Gang**, from the royal favours which were showered on them. It was built by **Aziz Kokaltash**, foster-brother of Akbar, who died in 1624 A.D.

About 2 m. from the Dargah towards the tomb of Sajdar Jang will be seen a fine domed mausoleum on the left and four similar buildings on the right. The first is that of **Mubarak Shah**, murdered in 1433. Of those on the N. side of the road, the nearest (figured in Fergusson's *Architecture of India*) covers the grave of another Saiyad King, **Muhammad Shah**; the next is the fine gateway to a mosque beautifully decorated with plaster, and the most splendid specimen of this work in all India; the third is a nameless tomb, and the fourth, N. of the village and close to a fine stone bridge, is the mausoleum of **Sikandar Lodi** (1489-1517), built in the middle of a fine fortified enclosure. No one who can by any means spare an hour should fail to visit these fine buildings.

Half a mile to the W., and facing the end of the road, is the mausoleum (styled "the last flicker of the lamp of Mughal architecture") of **Nawab Sajdar Jang**

(died 1754), by which title Mansur Ali Khan, the second Prince of Oudh and first Nawab Wazir, was known. The large garden enclosure is entered by a fine gateway, to the N. of which is a mosque opening to the outside of the garden. The tomb stands on a high platform at the end of a paved walk, once with water down the centre of it, as at the Taj. It is 90 ft. square, and is arranged in three storeys; some of the fawn-coloured stonework on it is very effective, but the marble decoration inlaid on the corner red towers greatly spoils the general effect. In the central chamber is the carved tomb of Safdar Jang, and in the chamber below are two earthen graves. The plaster decoration of this chamber and the rooms round it is perhaps the weakest feature of the building. The view from the top of the roof is very fine. The garden has been improved of late years. The road to the N. of the tomb, which connects it with the **Ajmer Gate**, runs directly through the centre of the area in which the New Capital of Delhi has been constructed (p. 322). 3 m. to the N., on the E. of Parliament St. in New Delhi, is a ruined Observatory, Jantar Mantar, erected, like those at Ujjain, Jaipur, and Benares, by Maharaja Jai Singh of Jaipur about 1725 A.D. The largest of the buildings is an immense equatorial dial, named by the Raja "Prince of Dials," the dimensions of the gnomon being as follows:—

	ft.	in.
Length of hypotenuse .	118	5
" base .	104	0
" perpendicular	56	7

To the S. of the gnomon are two circular structures, with niches in the walls to enable the ascension and declension of the stars to be marked on them. 2 m. N. of the Observatory is the Ajmer Gate of the city, adjoining the New Delhi Railway Station.

- (4) **The Extreme S. of the Surroundings of Delhi, including the Kutb (11 m. from Delhi) and Tughlakabad (5 m. from the Kutb).**

Immediately S. of the tomb of Safdar Jang is the field of battle upon which Timur utterly defeated Muhammad Shah Tughlak and his Minister on 12th December 1398, and became master of Old Delhi. A mile farther S., on the left side of the road, is seen the dark wall of the Idgah, where Timur encamped the day after the battle. E. of this rise the walls of Siri, and to the S. of them a lofty platform known as the Badi Mandal, and the **Begampur Mosque** with its many domes. This mosque has an extremely fine court, and was built by the Wazir Jahan Khan in the reign of the Emperor Firoz Shah; it is now occupied by a village in which some Europeans are said to have been concealed in 1857. A little farther on, and about 1½ m. to the W. of the road, a large dome rising above trees indicates the **Mausoleum of the Emperor Firoz Shah**, who died in 1389. It is built on the S.W. corner of **Hauz Khas**, constructed by 'Ala-ud-din Khilji, and is well deserving of a visit on account of its picturesque situation. A path has lately been made from the Kutb road which runs directly to this group of buildings, on which much conservation has lately been done. It was here that Timur first rested after his victory. At the 9th milestone from Delhi the road passes through the **Jahanpanah** defences, which were constructed to connect Siri, the new city of 'Ala-ud-din, with the older Delhi to the S. of it. The wall of this, originally the **Fort of Rai Pithora**, is crossed at the 10th m., whence the Northern wall of the citadel of **Lal Kot** is well seen. The remains of the walls of the citadel of Rai

Pithora have been marked out by beacons. In the middle of the E. side of the Lal Kot is the Kutb enclosure, and on the S. wall is the tomb of Adham Khan (p. 319). Rai Pithora is the local name of the Prithvi Raja, the gallant Chauhan Prince of Ajmer, grandson of both Anang Pal II. Tomar and his conqueror Bisal Deo, Chauhan, who checked Shahab-ud-din Ghorî near Thanesar in 1191, but was defeated and put to death the next year, the fortress falling in 1193.

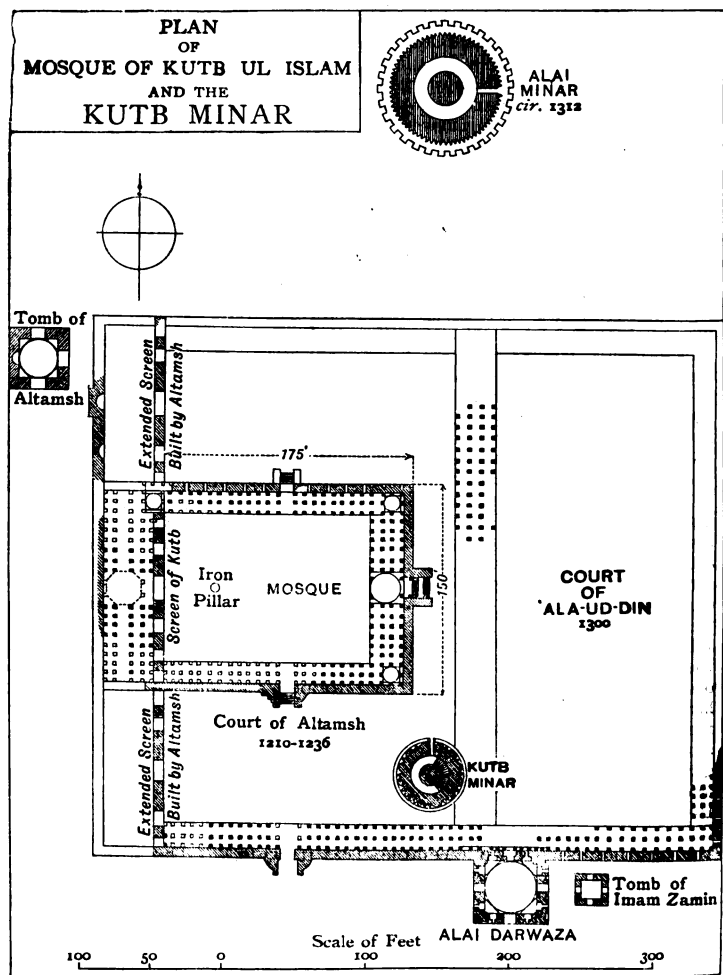
The arrangement of the buildings of the **Kutb Minar Enclosure** will be readily understood from the plan given on p. 316. The original **Kuwwat ul Islam Mosque** was begun by Kutb-ud-din Aibak when Viceroy of Shahab-ud-din Ghorî, after the capture of Delhi in 1193 A.D., as recorded by the King himself in the long inscription over the inner archway of the E. entrance. Even in ruins it is a magnificent work. It was seen by Ibn Batuta about 150 years after its erection, when he describes it as having no equal, either in beauty or extent, and was extolled by the poet Amir Khusru, who specially mentions the extension of 'Ala-ud-din. As originally designed, it is not so large as, for example, the great mosque of Jaunpur; but with its additions it is still unrivalled for its grand screen of gigantic arches, and for the graceful beauty of the flowered tracery which covers its walls. It occupies the site of Rai Pithora's Hindu Temple, demolished by the Muhammadans. Altamsh in 1210-30 surrounded it by a larger cloistered court, in the S.E. corner of which stands the Kutb Minar, and extended the great screen of arches N. and S. across the extensions on these sides; and in 1300 'Ala-ud-din appended a further Eastern court, entered by his great S. gateway, the Alai Darwaza, and designed a

great addition, with a further extension of the screen on the N. side. Within this extended area he commenced to build the Alai Minar, which was to correspond with the Kutb Minar, but to be twice its size; the project died with him. Ruined piers of his screen still remain. The main entrance to the original mosque is an arched gateway in the centre of its E. wall. Steps ascending under this lead to the courtyard (942 ft. by 108 ft.), which is surrounded by cloisters formed of Hindu and Jain pillars placed one upon another. Most of these are richly ornamented; many of the figures have been defaced by the Muhammadans, though some may still be found in unnoticed corners. The Arabian inscription over the E. gate states that the materials were obtained from the demolition of twenty-seven idolatrous temples, each of which had cost twenty-seven lakhs of dîlîals, fifty dîlîals being equal to one rupee. The domed pavilions in the angles of the cloisters are worthy of notice.

The famous Iron Pillar (see p. 317) stands in front of the central opening to the mosque proper—a building of small proportions, and now in ruins, overtopped and hidden by the grand screen of lofty arches which occupies the whole of the W. side. This screen was erected by Kutb-ud-din as an adjunct to his other work, and was extended beyond on either side for 115 ft. by Altamsh. The central arch is 53 ft. high by 22 ft. wide. "The Muhammadan conquerors had a tolerably distinct idea that pointed arches were the true form of architectural openings, but, being without science sufficient to construct them, they left the Hindu architects and builders to follow their own devices as to the mode of carrying out the form. Accordingly, they proceeded to make the pointed openings on the same principle

upon which they built their domes —they carried them up in horizontal courses as far as they could,

adapted directly from that on the old pillars of the cloister. Fragments of the roof of the mosque



and then closed them by long slabs meeting at the top." The ornamentation, interspersed with texts from the Koran, is evidently

still remain, supported by old columns, and do not reach more than one-third of the height of the screen in front of it. When

Delhi was captured by Timur the Mughals massacred all the persons who had taken refuge in the mosque.

The whole enclosure has been laid out so as to indicate the various additions made to the original mosque.

The Iron Pillar is one of the most curious antiquities in India. It is a solid shaft of wrought iron, more than 16 in. in diameter and 23 ft. 8 in. in length. The height of the pillar above ground is 22 ft., but the smooth shaft is only 15 ft., the capital being $3\frac{1}{2}$ ft. and the rough part below also $3\frac{1}{2}$ ft.

"The Iron Pillar records its own history in a well-executed Gupta inscription of six lines of Sanskrit poetry. It was first studied by James Prinsep (*A.S.B. Journal*, 7, 630), and has been finally edited by Dr J. F. Fleet (*Gupta Inscriptions, Corpus Inscriptionum Indicarum*, vol. 3). It contains the posthumous eulogy of a king of the name of Chandra, who is said to have conquered the Vanga Country (*i.e.*, Bengal), and, after having crossed the seven tributaries of the River Indus, to have vanquished the Váhlikas. In his memory the 'standard of the Lord Vishnu' was set up on the mountain called Vishnupada, 'the footprint of Vishnu.' " From this it may be surmised that the Iron Pillar bore originally the effigy of the sun-bird Garuda, and stood in front of a Vishnu temple. It is also evident that the pillar does not now stand in its original position, as the locality cannot possibly be defined as "a mountain." As the Gupta characters of the inscription belong to the Eastern variety, it is most likely that the pillar was brought to Delhi from Bihár, the ancient country of Magadha, which formed the nucleus of the Gupta empire. The King Chandra mentioned in the inscription is probably the Gupta Emperor Chandra-gupta

Vikramáditya, who reigned about 400 A.D. The name of Anang Pál also is inscribed on the shaft with the date Samvat 1109=1052 A.D. According to tradition, it was Anang Pál, the founder of the Tomar dynasty, who erected the pillar. It rested on the head of a great snake until the Raja unwisely moved it to see if this were so—an act which cost the Tomars their kingdom. This tradition perhaps preserves a reminiscence of the removal of the pillar to Delhi by Anang Pál. Four feet above the inscription is a deep indentation, said to have been made by a cannon-ball fired by the troops of the Bharatpur Raja. Tablets with the Sanskrit text of the inscription, together with translations in English, Hindi, and Urdu, will be found in the northern cloister of the mosque; they were erected by Pandit Banke Rai of Delhi.

Sir Robert Hadfield, F.R.S., to whom chippings of the Iron Pillar were sent for analysis by the Director-General of Archæology, arrived at the following results:—

Carbon . . .	0.080 per cent.
Silicon . . .	0.046 "
Sulphur . . .	0.006 "
Phosphorus . . .	0.114 "
Manganese . . .	nil "
<hr/>	
Total elements other than iron . . .	0.246 per cent.
Iron . . .	99.720 "
<hr/>	
Total . . .	99.966 per cent

Specific gravity, 7.81 per cent. Ball hardness, No. 188.

"It will be noticed that the material is an excellent type of wrought iron, the sulphur being particularly low (0.006 per cent.), indicating that the fuel used in its manufacture and treatment must have been very pure (probably charcoal). The phosphorus is 0.114 per cent. There is no manganese present—a somewhat special point, as wrought iron usually contains manganese. The

iron was ascertained by actual analysis, and not 'by difference.' "

The Kutb Minar is a grand monument, and looks what it is intended to be—a tower of victory. It has been questioned whether it was not originally Hindu, altered and completed by the Muhammadan conquerors, but the conclusion of General Cunningham—that it is a purely Muhammadan structure—seems to be the right one.¹ The lowest storey bears the name of Muhammad bin Sam (Shahabuddin), and of Kutb-ud-din Aibak, and the next three storeys contain that of Altamish. At the entrance door is an inscription of Sikandar Lodi, with the date 1503. As seen at present, it is 238 ft. high, and rises in a succession of five storeys, marked by corbelled balconies and decorated with bands of inscription. The base diameter is 47 ft. 3 in., and that of the top about 9 ft. The three first storeys are of red sandstone with semi-circular and angular flutings; the two upper storeys are faced chiefly with white marble, and were almost entirely rebuilt by Firoz Shah Tughlak in 1368, when he also added a cupola. On 1st August 1803 the whole pillar was seriously injured by an earthquake and the cupola thrown down. It was injudiciously restored in 1829, the battlements of the balconies being removed and replaced by the present flimsy balustrades. Notice should be taken of the honeycomb work beneath the brackets of the first-storey balconies, of which the "structure differs in no perceptible degree from that in the Alhambra." The lowest great band of text inscription is extremely beautiful, and is well seen from the

top of the cloister of the mosque, or of the Alai Gate. A magnificent view is obtained from the summit, reached by 379 steps; but that from the first gallery, 95 ft. above the ground, is nearly as fine.

The Tomb of Altamash (who died in 1235 A.D.) stands outside the N.W. corner of his extension of the mosque. It is of red sandstone. The main entrance is to the E., but there are also openings to the N. and S. The interior is almost completely covered with beautiful Saracenic surface decoration, and is inscribed with finely-written passages of the Koran; in the centre of the W. side is a Kibla of white marble discoloured with age. The tomb is in the centre, and stands on a high base; that the actual tomb is a cenotaph is proved by the recent discovery of a chamber beneath it (now approached by a narrow flight of stairs) which apparently contains the real grave. General Cunningham notes that though there is no roof, "there is good reason to believe that it was originally covered by an overlapping Hindu dome. A single stone of one of the overlapping circles, with Arabic letters on it, still remains." Fergusson points out that: "In addition to the beauty of its details, it is interesting as being the oldest tomb known to exist in India" (*Ind. Arch.*, 2, 209).

The Alai Darwaza, 40 ft. to the S.E. from the Kutb Minar, is the S. entrance of the great or outer enclosure to the mosque. It was built of red sandstone richly ornamented with patterns in low relief, in 1310 A.D., by 'Ala-ud-din. Over three of the entrances are Arabic inscriptions, which give 'Ala-ud-din's name and his well-known title of Sikandar Saii, the Second Alexander, with the date 710 A.H. The building is a square with lofty doorways, with pointed horse-shoe arches on three sides and a rounded arch curiously

¹ For particulars regarding the discussion, see *Archaeol. Rep.*, 1, 190. See also *History of the Kutb Minar*, by R. N. Munshi (Bombay, 1911); and *Historical Memoir on the Kutb*, by J. A. Page (Mem. Arch. Survey of India, No. 22, Calcutta, 1926).

decorated on the inner side. In each corner there are two windows, closed by massive screens of marble lattice-work. The gate stands high above the ground to the S. of it, and should be viewed from that side. A considerable area of ground lying between the Kutb enclosure and the walls of the "Metcalf Estate" has recently been acquired, in order to allow the visitor to see the Alai Darwaza from the S. A few yards to the E. stands the richly-carved building in which is the tomb of **Imam Zamin**. He came to Delhi in the reign of Sikandar Lodi, and died in 944 A.H.=1537 A.D. The tomb is a small domed building, about 18 ft. square, of red sandstone, covered with chunam. There is an inscription in the Tughra character over the door.

The **Alai Minar** stands 150 ft. N. of the original Kutb enclosure. The inner tower and outer wall are of very coarse work, of large rough stones; the flutings in the exterior show the shape which the Minar would have assumed when lined with red sandstone. The total height as it now stands is 70 ft. above the plinth, or 87 ft. above the ground level. Had this pillar been finished it would have been about 500 ft. high. In the S.W. corner of the *outer* enclosure, corresponding with the tomb of **Altamsh**, is a group of ruined buildings. The ruin on the S. side is believed to have been the tomb of 'Ala-ud-din, and the grave in the centre room, lately brought to light in the course of excavation, is said to be his: the buildings on the right are known as 'Ala-ud-din's College. Considerable conservation work has lately been carried out in connection with the Kutb group of buildings. The old road running through the group has been diverted, lawns planted, and an attempt made by carefully designed shrubberies to indicate the site of the extensive colonnades.

To the S.E. of the Kutb Minar is a tomb of a brother of **Adham Khan**, once used as a country house by Sir T. Metcalfe, and 500 yds. beyond it is a fine mosque of the latest Pathan style, known as the **Jamali Mosque**. At the N.E. corner of it, in a separate enclosure, is the tomb of **Shekh Fazl-ullah**, decorated with bright tiles. 200 yds. due E. of the mosque, in the midst of mounds of ruins, are the broken massive walls of the **Tomb of the Emperor Balban** (1287 A.D.), which formed a **Darul-Aman**, or House of Refuge, in his lifetime.

To the W. of the Kutb enclosure, which is bounded by the road from Delhi to Mahrauli, a paved way leads to a well-known Hindu temple called the **Jog Maya**. 200 yds. farther S. the tomb of **Adham Khan** rises high on the S. wall of **Lal Kot**. **Adham Khan**, who was half-brother as well as foster-brother of **Akbar**, murdered **Azam Khan**, whose wife was also foster-mother to the Emperor, in the palace of **Agra**, and was thrown down from the terrace there by the Emperor, who himself felled him with a blow of the fist as he issued from his private apartments. **Adham Khan** had previously distinguished himself by driving the mistress of the last King of **Malwa** to suicide upon capturing **Mandu** (p. 149) while his mother, not to be outdone, put to death two of that Prince's daughters for fear that they might complain to the Emperor. She is said to have died of a broken heart a few days after her son, and to have been buried here too. The style resembles that of the Middle Pathan period; it was probably rebuilt from the material of an earlier tomb.

A short distance to the S.E. of the tomb, across the road, is a large round well, into which also men and boys dive. Not far from

this is the northern entrance of the **Dargah**, or shrine, of **Kutb-ud-din Bakhtiar Kaki**; the inner gateway and the ruined music-gallery gate on the right of the approach date from the time of **Salim Shah**. Close to a third gateway is the grave enclosure of the **Nawabs of Jhajjar**, the last of whom was hanged in 1857. In the main courtyard, which is but small, are a mosque and the tomb of **Maulana Fakr-ud-din**; on the right, and standing back from them, is a gate to another court and the main W. approach to the shrine. S. of this western court is an enclosure with a pretty but feeble **Moti Masjid** of white marble, built by **Bahadur Shah**, eldest son of **Aurangzeb**, in 1709, and beyond it, in a separate court, are the simple graves of the **Kings of Delhi Akbar Shah II.** (died 1837), of the blind **Shah Alam** (died 1806), and of the **Emperor Bahadur Shah I** (died 1712). The space between the last two was to have been the resting-place of the last King of Delhi, who died at Rangoon in 1862. From the Eastern courtyard a passage, paved and lined with marble, and with a fine pierced marble screen on the right hand, leads past the **Grave of the Saint**, which stands in the open, protected by an awning above it; on the back wall of this enclosure, which may be entered only with uncovered feet, is some fine work of glazed tiles dating from the time of **Aurangzeb**. The Saint, who was born at **Ush**, in **Turkestan**, and perhaps came to Delhi before the **Muhammadian** conquest, died during the reign of **Altamsh** in 1235 A.D.: his name, **Kaki**, is derived from the alleged miracle of his having been fed by heavenly food—*kāk* = cake. Outside the innermost shrine is the mosque where the Saint used to pray, and beyond it is a picturesque **baoli** (tank), now dry. At the W. end of this is the grave of **Zabita Khan**, and another, said to be that of **Ghulam Kadir Khan**,

who thus, if the grave be really his, rests near his unhappy victim **Shah Alam**. To the S. of these is a small court with the graves of the family of the **Nawab of Loharu**.

Outside the W. gate is a fine gateway known as the **Mahal Sarai**, and beyond it a pretty mosque standing on a high platform built by **Ahsanullah Khan**, physician of the last King of Delhi. Turning S. from here for 400 yds. along the main picturesque street of **Mahrauli**, the **Shamsi Haуз**, the great tank of **Shams-ud-din Altamsh**, will be reached on the right. It was constructed by that Emperor, and has a ruined pavilion in the centre like the **Hauз Khas** of 'Ala-ud-din, and must have been very picturesque when full of water. On the E. bank is an interesting building of red sand stone called the **Jaház**, or **Ship**, and beyond it the **Aulia Masjid**, where, according to tradition, thanks were offered up on the capture of Delhi in 1191. On the opposite side of the road here is the picturesque **Jhirna** (Spring) garden, through which the water of the tank descended and found its way past the tomb of **Balban** to **Tughlakabad**. The walk down the depression to the tomb is exceedingly pretty.

The **Fort of Tughlakabad** lies 5 m. to the E. of the **Kutb**. The road to **Tughlakabad** will be found to the left immediately on leaving the **Kutb** enclosure, and passes through the Eastern wall of **Kila Rai Pithora**, a mile farther on. The N.E. portion of this wall runs 1½ m. up to **Khirkī**, where there is a most interesting covered mosque with four open courts, each 32 ft. sq., built by **Jahan Khan** in 1380; it must be visited on foot, but is well worth a visit. Adjoining the mosque on the E. is a fine sluice of seven bays, apparently of the same date as the mosque and

$\frac{3}{4}$ m. N.E. again is the Dargah of Chiragh Delhi, the last great Delhi Saint, who died in 1356, and the Tomb of Bahlol Lodi (died 1488). Long before it is reached the great Fort of Tughlak Shah is seen rising high above the plain to the left of the road. General Cunningham writes that "it may be described with tolerable accuracy as a half-hexagon in shape, with three faces of rather more than $\frac{3}{4}$ m. in length, and a base of $1\frac{1}{4}$ m., the whole circuit being only 1 furlong less than 4 m. It stands on a rocky height, and is built of massive blocks of stone, so large and heavy that they must have been quarried on the spot. The largest measured was 14 ft. in length by 2 ft. 2 in., and 1 ft. thick, and weighed rather more than 6 tons. The short faces to the W., N., and E. are protected by a deep ditch, and the long face to the S. by a large sheet of water, dry, except in the rainy season, which is held up by an embankment at the S.E. corner. On this side the rock is scarped, and above it the main walls rise to a mean height of 40 ft., with a parapet of 7 ft., behind which rises another wall of 15 ft., the whole height above the low ground being upwards of 90 ft." It had thirteen gates, and there are three inner gates to the citadel.

Opposite the causeway to the tomb an arched gateway leads into the fort at the point where the largest of the tanks in it was excavated. Beyond this, to the N.W. and N. are ruins of the palace and a mosque, and high above it, in the S.W. angle, is the citadel, which occupies about one-sixth of the area. It contains the ruins of an extensive palace, surmounted by an inner citadel, from which there is a splendid view. The ramparts are raised on a line of domed rooms, which rarely communicate with each other, and which formed the quarters of the garrison. One dark passage near

the S.E. corner, below the inner citadel, leads to a small sally-port in the outer wall. The walls slope inwards, and the vast size, strength, and visible solidity of the whole give to Tughlakabad an air of stern and massive grandeur that is both striking and impressive.

In the N. part of the fort below are the ruined walls of a Jami Masjid. The curse of the saint, Nizam-ud-din Aulia, upon Tughlakabad was—

"Ya base Gujar
Ya rahe ujar"

("May it be inhabited by Gujar
or may it remain desolate"),

and while it is impressively desolate now, it also contains small Gujar colonies in the midst of its desolation.

The fine *Tomb of Tughlak Shah* is outside the S. wall of Tughlakabad, in the midst of an artificial lake, and surrounded by a pentagonal outwork, which is connected with the fort by a causeway 600 ft. long, supported on twenty-seven arches. Fergusson says (*Ind. Arch.*, 2, 215): "The sloping walls and almost Egyptian solidity of this mausoleum, combined with the bold and massive tower of the fortifications that surround it, form a model of a warrior's tomb hardly to be rivalled anywhere, and in singular contrast with the elegant and luxuriant garden-tombs of the more settled and peaceful dynasties that succeeded." The outer walls have a slope of 2.333 in. per foot; at base they are $11\frac{1}{4}$ ft. thick, and at top 4 ft. The exterior decoration of the tomb itself depends chiefly on contrast of colour, which is effected by the use of bands and borders of white marble inserted in the red sandstone. In plan it is a square, and three of its four sides have lofty archways, the space above the doorway being filled with a white marble lattice screen of bold pattern. It is surmounted by a white marble

dome. In the S.W. corner of the enclosure is a small domed chamber with a number of graves.

"Inside the mausoleum there are three cenotaphs, which are said to be those of Tughlak Shah, his Queen, and their son Juna Khan, who took the name of Muhammad when he ascended the throne." This King was, and is still, known as the Khuni Sultan, "the bloody King." Firoz Shah, his successor, bought acquittances from all those he had wronged, and put them in a chest at the head of his tomb, that he might present them when called to judgment.

Opposite the S.W. corner of Tughlakabad a fine embankment which held up the waters of the lake connects Adilabad with it; there is a sluice between it and the rocky ground at the N. end. Adilabad is said to have been built by Muhammad Tughlak; there is a fine gate in the W. face. From the top there is a magnificent view of the fort and the Kutb Minar. A little farther to the E. is an isolated fortified residence called the Nai's (Barber's) Fort, which seems to have been a college or the residence of some saint. $2\frac{1}{2}$ m. farther on, and 8 m. from the Kutb, is Badarpur, with an interesting Mughal Serai, on the Grand Trunk Road and railway from Delhi to Muttra. Tilpat lies 4 m. S.W. of Badarpur. From this place it is 7 m. to the mausoleum of Humayun and shrine of Nizam-ud-din.

(5) New Delhi.

The New Capital of Delhi is one of the most conspicuous examples of town-planning in existence. At the time of the Delhi Darbar in December 1911 His Majesty the King-Emperor, George V., said:—"It is my desire that the planning and designing of the public buildings to be erected be considered

with the greatest deliberation and care so that the new creation may be in every way worthy of this ancient and beautiful city."

The Raisina Site, which is on the eastern slope of the hills to the south of Delhi, was the selection of a Town-planning Committee, consisting of Captain Swinton, Mr J. A. Brodie and Sir Edwin Lutyens, which re-

REFERENCES TO SKETCH PLAN

	No. in Plan.
<i>Government Buildings.</i>	
Legislative Buildings (Parliamentary Rotunda)	18
Imperial Record Office	13
Secretariat, North Block	20
Secretariat, South Block	21
Telegraph and Telephone Administrative Offices for North India	9
<i>Residences.</i>	
Commander-in-Chief	30
Controller to Viceroy	27a
Government House (Viceroy's Residence)	24
Members of Council	12
Military Secretary to Viceroy	26a
Private Secretary to Viceroy	26
Staff Quarters, Viceroy	25
Surgeon to Viceroy	27
<i>Churches.</i>	
Anglican Church, Site for	15
R.C. Cathedral, Site for	33
Wesleyan Church	32
<i>Hospital.</i>	
Lady Hardinge College and Hospital for Women	1
<i>Museum.</i>	
Ethnological Museum, Site for	14
<i>Memorials.</i>	
All-India War Memorial	11
Imperial Service Cavalry Brigade War Memorial	29
Jaipur Commemorative Column	23
<i>Open Spaces.</i>	
Alexandra Place (Post Office)	5
York Place	16
Government Court (Raisina Hill)	19
Prince Edward Place	17
Connaught Place (Shopping Centre)	2
Viceroy's Court	22
Windsor Place	10
Imperial Bank of India	7
Club, Site for New	31
Jantar Mantar (Old Observatory)	8
Market Centre	4
Sikh Shrine	33
Police Lines	6
Bodyguard Lines	28

NEW DELHI

New Delhi
Railway Station

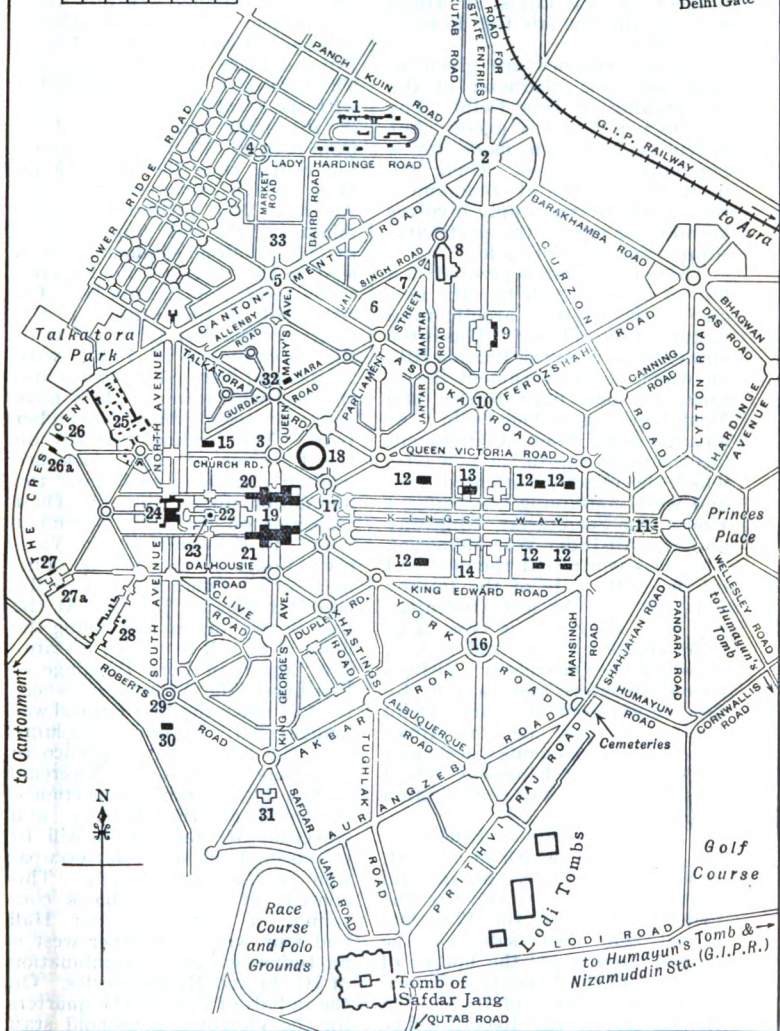
Ajmer Gate

DELHI CITY

Scale of Feet
0 1000 2000 3000 4000

Turkoman Gate

Delhi Gate



Emery Walker Ltd. sc.

ported in 1912 and again in 1913. The selection of this southern site was endorsed in 1913 by a Committee consisting of the late Surgeon-General Lukis, Sir Hugh Keeling and the late Col. Robertson, I.M.S.

A few statistics are given to show the vast character of the undertaking of New Delhi. The present population is 30,000; but provision has been made for a population of 70,000. There will be in all 84 miles of communications. The water-supply involves 70 miles of pipes; the electricity-supply, 202 miles of cables.

The general plan is pivoted on a line of origin which ties the new city with a great architectural feature of the old city. This is the straight line from the Raisina Hill, on which the Government Secretariat has been built, to the Jami Masjid (p. 302) in Old Delhi. At an angle of 60° from this alignment lies the main axis of the new city, which is exactly oriented east and west, containing Government House, the Secretariat, Kingsway and the All-India War Memorial. This axis centres at the east end on the N.W. gate of the Purana Kila, or the old fort (Indrapat, p. 310). Kingsway is crossed at right angles by a N. and S. line, on which lies Queensway. Visitors should therefore start a tour by proceeding from the New Delhi Railway Station near the Ajmer Gate (p. 314) and along Queensway to the point in Kingsway where it is crossed by the continuation of Queensway.

The main avenue, or Kingsway, has a parkway width of 1175 ft. and is flanked by ornamental tanks. At the east end are the Princes Park and the War Memorial. On both sides of the central avenue are the houses of members of the Executive Council of the Government of India. On the N. side is the Record Office which, when completed, will also provide accommodation for an

ethnological museum. The nucleus of the collection is at present housed in a temporary building, opposite, on the S., which contains Sir Aurel Stein's Central Asian antiquities, with their remarkable frescoes. Farther west is Prince Edward Place, a spacious piazza.¹ The forecourt, which is provided with six fountains, covers an area of 26½ acres, and roads radiate from it in all directions. Through the centre runs the Processional Way, which commences at the All-India War Memorial and terminates at the wide steps, flanked by colossal stone elephants, which lead to the Viceroy's Court (1100 ft. by 400 ft.) on Raisina Hill. On either side of the entrance to the Court are the Secretariat offices of the Government of India, with loggias and recessed gateways and crowned with towers; these have been occupied since November 1926. The leading features on the E. front of each block are vaulted chambers enshrining the foundation-stones laid by Their Majesties on the 15th December 1911. In the centre of the Viceroy's Court is the Jaipur Commemorative Column, a gift of the late Maharaja of Jaipur. At the base of the column and facing the main vista will be placed a statue (by Jagger) of Lord Hardinge of Penshurst, the Viceroy in whose term of office the New Capital was inaugurated. Beyond the column rises the lofty pillared portico of Government House or Viceregal Lodge, the admirably proportioned residence of the Viceroy and Governor-General, which will (it is expected) be ready for occupation in November 1929. This consists of a central block containing a domed Darbar Hall and four wings. Farther west is an Indian garden, a combination of Hindu and Mughal styles. On the radials of this are the quarters for the Viceroy's household staff

¹ Compare the railing at the Sanchi Tope (p. 67).

and for the Private Secretary and Military Secretary in the N., and the quarters for the Viceroy's Surgeon and the Viceroy's Controller and the Bodyguard Lines in the S.

To the north-east of the Raisina Hill on the line of origin already mentioned is the circular pile on a massive plinth of Parliamentary buildings, in which are three semicircular chambers for the Chamber of Princes, the Council of State (the Upper House), and the Legislative Assembly (the Lower House). The foundation-stone was laid by H.R.H. the Duke of Connaught in 1921; and the buildings were opened by His Excellency Lord Irwin on the 18th January 1927. The main features of the design are spacious lobbies and room for expansion. The Central Library, which is connected with these chambers, is surmounted by a 90 ft. dome. Portraits of Lords Hardinge, Chelmsford and Reading, the three "Delhi Viceroys," hang on the walls, and there are spaces for their successors. In the grounds, facing Church Road, a statue of Lord Reading (by Jagger) will be placed. The road to the N.E. from the Parliamentary buildings, which is aligned on the Jami Masjid as already mentioned, is called Parliament Street, and forms the business approach to the new city. On the west of Parliament Street are the Police Lines and the Imperial Bank of India (in Jai Singh Road); and on the east is the old Observatory of Maharaja Jai Singh (p. 314).

The northern portion of Queensway constitutes an approach to the new Railway Station for State Entries. The road then to the S. passes through Connaught Place, a two-ringed shopping centre with gardens. From this Circus radiate several roads, the chief of which are Curzon Road, with a vista to the S.E. of Princes Place, in which is situated the War Memorial

arch; and Parliament Street with a vista of the Parliamentary buildings to the S.W., also the main road to the Cantonments. On the east of Queensway are the Telegraph and Telephone Offices for N. India; and opposite is the Hostel for Members of the Legislatures. Queensway then proceeds to the circular open space called Windsor Place. The road next crosses Queen Victoria Road and traverses the main avenue, Kingsway, past the Record Office; and crossing again King Edward Road leads to York Place, an oval space, where the diagonal roads, York Road and Akbar Road, meet.

The various residential bungalows provided for the officers of the Government of India are fully occupied; and it is anticipated that further accommodation will be required when Army Headquarters are transferred from the temporary buildings in Old Delhi to the Secretariat blocks. About forty sites for the residences of the Indian Princes and Chiefs have been allotted in the vicinity of Princes Place at the east end of Kingsway. The residences of H.E.H. the Nizam of Hyderabad and H.H. the Maharaja of Bikaner are to the N. and S. of Princes Place, and Travancore House is a short distance away on Curzon Road. Progress is being made with the construction of other houses.

Three radial roads run N. from Princes Place, commemorating the Darbars of 1877, 1903 and 1911, while to the S. one road is aligned on Safdar Jang's Tomb (p. 314) in the S.W. and Wellesley Road in the S.E. joins the Delhi-Muttra Road, which passes Humayun's Tomb (p. 310) and leads also to the municipal golf-course, which promises to be one of the most attractive links in N. India.

The Government Offices on the Raisina Hill are the meeting-place of Queen Mary's Avenue coming from Alexandra Place on the N.

and of King George's Avenue coming from the site of the new Club building in the S. The Post Office is in Alexandra Place, and beyond it to the N. is Market Road leading to the markets.

Government House is the meeting-place of the North Avenue and the South Avenue. North Avenue terminates at Cantonment Road. This road, starting to the S.W. from the shopping centre (Connaught Place), reaches Alexandra Place (with the Post Office on its S. side), and, skirting the surroundings of Government House, proceeds to the Cantonments under the name of The Crescent. On the west of Cantonment Road opposite the quarters of the Viceroy's household, is a fine public recreation space, Talkatora Park, on the site of an old Mughal garden, with grounds for football, hockey and tennis. At the bottom of South Avenue is the Imperial Service Cavalry Brigade War Memorial, unveiled by Lord Reading in 1924. Immediately to the S. of the Memorial in Roberts Road, a site has been chosen for the residence of the Commander-in-Chief. Farther south beyond the Club site and to the west of Safdar Jang's Tomb is the Race-course, in which are grounds for cricket and polo.

The All-India War Memorial in the centre of Princes Park is an arch spanning the east end of Kingsway, designed by Sir Edwin Lutyens. The Memorial is 138 ft. high and 90 ft. wide. The span of the arch is 30 ft. and the height from the ground to the crown of the arch is 75 ft. Over the arch on both sides is the word INDIA flanked by MCM. Immediately below on the left is XIV and on the right XIX. The upper portion is of white Dholpur stone and the lower of red Bharatpur stone. Above the arch is a great cornice, and a series of great steps. On the top of all will eventually be placed a

great bowl, 11½ ft. in diameter. The foundation-stone was laid by H.R.H. the Duke of Connaught in 1921.

A Wesleyan church has been erected at the junction of Queen Mary's Avenue and Gurdwara Road, and a site for an Anglican church has been selected in Church Road, N. of the Jaipur Column. The site for the Roman Catholic Cathedral is on the N. side of Alexandra Place.

The Lady Hardinge College and Hospital for Women is on the west of Connaught Place. It is intended to erect a Civil Hospital to serve the needs of the New Capital, and also a Central Hospital for the whole of Delhi; but the sites have not yet been selected.

The distance from the new Railway Station to York Place is about 2½ m.; to the Parliamentary buildings about a mile; and to the Cantonments over 5 miles, while the distance from the War Memorial to Government House is about 1½ mile.

Sir Hugh Keeling, C.S.I., A.M.I.C.E., was the chief engineer continuously from 1912 till his retirement in 1925, when he was succeeded by Mr A. M. Rouse, C.I.E., F.C.H. The architect of Government House is Sir Edwin Lutyens, R.A., who is also primarily responsible for the lay-out of the city, Viceroy's Staff Quarters, Viceroy's Court, Great Place and Kingsway. The Secretariat and Parliamentary Buildings and the residential bungalows have been designed by Sir Herbert Baker, A.R.A. Their aim has been "to express, within the limits of the medium and of the powers of its users, the ideal and fact of British rule in India, of which New Delhi must ever be the monument."

The revised estimate of expenditure for New Delhi up to March 1927 was 1507 lakhs of rupees, and the expenditure incurred was 1311 lakhs.

ROUTE 15.

- (a) DELHI to **Kasauli** (171 m.) and **SIMLA** (219 m.) by **Panipat**, **Thanesar**, **Ambala**, and **Kalka** (162 m.).
- (b) DELHI to **LAHORE** (310 m.) by **Ghaziabad Junction**, **Meerut**, **Sardhana**, **Saharanpur**, **Ambala**, **Sirhind**, **Ludhiana**, **Jullundur**, and **Amritsar**; and from **Amritsar** to **Dalhousie** and the **Kangra Valley**.
- (c) DELHI to **LAHORE** (297 m.) by **Jakhal**, **Bhatinda**, **Ferozepore**, **Kasur**, and **Raiwind**.

There are two routes from *Delhi* to *Ambala*, both broad-gauge and controlled by the N.W. Ry. :—

(1) The E.I. Ry. Punjab Mail route from *Calcutta*, which proceeds along the W. bank of the *Jumna*, through *Panipat* and *Karnal*, 123 m., in 4 hrs. to *Ambala* and thence to *Kalka* and *Simla*.

(2) The G.I.P. Ry. Punjab Mail route from *Bombay*, which follows the E. bank of the river, crossing it twice, and passing through *Ghaziabad*, *Meerut*, and *Saharanpur*, reaches *Ambala*, 162 m., in 5½ hrs.

From *Ambala* Route (2) proceeds to *Lahore*. An alternative route to *Lahore* travels over the N.W. Ry. by way of *Bhatinda*.

(1) Delhi to Kalka and Simla.

Leaving the central station at *Delhi*, the railway proceeds over a level plain to

9 m. **Bādli**. Before reaching this station the ruins of the *Shalimar* gardens (p. 308) are seen on the left, and the battlefield of *Badli-ki-sarai* (pp. 292 and 308) on the right. From here the tract irrigated by the W. *Jumna* Canal is entered.

27 m. **Sonepat**, an ancient place, and with **Panipat** (see below), **Baghpat** (lying E. on the *Jumna*), **Indrapat** (p. 310), and **Tilpat**, one of the five estates or pats over which the traditional conflict of the *Mahabharata* took place about 1000 B.C. (p. lxii. *Introd.*). Metalled roads run from here to all important towns in the *Rohtak* district. A few motor lorries ply for hire.

55 m. **Panipat** station (D.B.) (pop. 27,343). Branch, 44 m. W. to *Jind Jn.* and another under construction, 44 m. to *Rohtak* on the *Delhi-Bhatinda* line (p. 351). Large civil R.H. and a small P.W.D. bungalow, where travellers can stay after obtaining permission from the Deputy-Commissioner, but they have to make their own arrangements for food. The modern town stands near the old bank of the *Jumna*, upon a high mound consisting of the debris of earlier buildings. In the centre the streets are well paved, but the outskirts are low and squalid. There are the usual civil offices.

The principal building of antiquity is the shrine of *Kalandar*, a celebrated local saint. The legends about him show that he directed the *Jumna* to move back seven paces, as he had become stiff standing in the water, but in her hurry to obey she moved back seven miles. He gave a charm to the *Panipat* people which dispelled all the flies, but they grumbled at this, so he brought them back a thousandfold. His body is said to have been buried in three places—namely, at *Karnal*, *Budha Khera*, and *Panipat*.

Panipat is famous as the place where three of the most decisive battles in India have been fought; but the silent plain tells no tales, and scarcely any sign remains of the events that have happened on it.

Here, on the 21st April 1526, *Babar* encountered *Ibrahim Lodi*,

King of Delhi. On the night before the battle Babar had sent out 5000 men to make a night attack on the Indian army, but this had failed, owing to a delay on the part of the attacking force, which did not reach the enemy's camp till dawn. With the first streaks of light next day the Mughal pickets reported that the Indians were advancing in battle array. Babar immediately prepared for action, and stationed strong flanking parties of Mughals on the right and left of his line. When the Indians arrived at the Mughal lines they halted for a moment, and Babar availed himself of their indecision to attack, at the same time sending his flanking parties to wheel round and charge them in the rear. Babar's left wing was roughly handled, but he supported it by a strong detachment from the centre, and the Indians in the end were driven back. On the right, too, the battle was obstinately contested, but Babar's artillery was the more effective, and at last the Indians fell into confusion. They maintained the battle till noon, when they gave way in all directions. The rest was mere pursuit and slaughter. According to Mughal accounts, 15,000 Indians were left dead on the field of battle, and those who fled from the field were chased as far as Agra. The body of Ibrahim Lodi¹ was found the same afternoon amidst 5000 or 6000 of his soldiers lying in heaps around him, and was specially honoured by the victor. Babar reached Delhi on the third day after the battle, and on the Friday following his name as Emperor was read in the public prayers.

The Second great battle was fought on the 5th of November 1556 A.D., when the youthful Akbar, who had just succeeded his father, the Emperor Humayun, and his General, Bahram Khan, de-

feated Himu,¹ the General of Sultan Muhammad Shah 'Adil, nephew of Sher Shah. Himu had 50,000 cavalry and 500 elephants, besides infantry and guns; but after a well-contested battle he was wounded in the eye by an arrow, taken prisoner, and put to death. This battle was decisive of the fate of the Pathan dynasty called the Sur, founded by Sher Shah, 1540-5, and finally established the fortunes of the House of Timur.

The Third battle took place on the 7th of January 1761 A.D., when the whole strength of the Mahrattas was crushed with terrible slaughter by Ahmad Shah Durani, the Afghan King. All the Mahratta Chieftains of note, Holkar, Scindia, the Gaekwar, the Peshwa's cousin and son, were present with their forces. The Mahratta army is said to have amounted to 15,000 infantry, 55,000 cavalry, 200 guns, and Pindaris and camp-followers numbering 200,000 men. The Afghan force consisted of 38,000 infantry, 42,000 cavalry, and 70 guns, besides numerous irregulars. The Mahrattas had allowed themselves to be cooped up in their camp for many days, and were compelled to fight by impending starvation. On the morning of the battle they marched out with the ends of their turbans loose, their heads and faces anointed with turmeric, in sign of despair. Seodasheo Rao, the Bhao, cousin and Generalissimo of the Peshwa, with Wiswas Rao, the Peshwa's eldest son, and Jaswant Rao Holkar, were opposite the Afghan Grand Wazir, Shah Wali Khan. The great standard of the Mahratta nation, the *Bhagwa Jhanda*, floated in the Mahratta van, and there were three *Jaripatkas*, or Grand Ensigns, of the Peshwa in the field.

The Mahrattas made a tremen-

¹ The alleged grave of the King lies on the N. W. side of the city.

¹ Himu, who had driven Humayun's Governor out of Delhi, had the misfortune to lose his guns before the battle.

dous charge full on the Afghan centre, and broke through 10,000 cavalry under the Wazir, which unwisely received them without advancing. The dust and confusion were so great that the combatants could only distinguish each other by their war-cries. The Wazir, who was in full armour, threw himself from his horse to rally his men, but most of them gave way; while Ibrahim Khan Gardi, who commanded the Mahratta artillery, broke the Rohillas who formed the right wing of the Muhammadan army, and killed or wounded 8000 of them. Ahmad Shah now evinced his generalship; he sent his personal guards to rally the fugitives, and ordered up his reserves to support the Wazir. In this protracted and close struggle the physical strength of the Afghans prevailed over the slighter frames of the Hindus. A little after 2 P.M. Wiswas Rao was mortally wounded, and the Bhao, after sending a secret message to Holkar, charged into the thickest of the fight and disappeared. Whatever the message to Holkar was, it proved instantaneously fatal, for he went off, and was followed by the Gaekwar. Scindia, who left the field last, was cut down by an Afghan horseman many miles from it; he used to say that for long years afterwards he constantly saw in his dreams his grim pursuer gaining and gaining on him, and finally leave him for dead. The Mahrattas then fled; thousands were cut down, and vast numbers were destroyed in the ditch of their entrenchment. The village of Panipat was crowded with men, women, and children, to whom the Afghans showed no mercy. They took the women and children as slaves, and after ranging the men in lines, amused themselves with cutting off their heads. The spot where the Bhao stood to watch the fight is now marked by a small monu-

ment, and is about 3 m. E. of Panipat. To the S. of this spot, near Ogra Kheri village, three gun emplacements, or mounds, still exist.

66 m. **Gharaunda.** A small village on the Grand Trunk Road. To the E. of the village are the two handsome gateways of the old Mughal sarai. The Emperor Shah Jahan laid out a road from Delhi to Lahore, marked it at intervals of a kos with large masonry pillars shaped like acorns and called *kos minar*. At the various stages he erected large *sarais*, or fortified walled enclosures, with numerous quarters for the benefit of travellers. Most of the kos pillars still exist, but the only remains of the old sarais in the Karnal District are these two gates at Gharaunda. The Grand Trunk Road follows roughly the line of the old route.

76 m. **Karnal station** (D.B. comfortable; near Grand Trunk Rd.; meals supplied; also large Govt. Rest House, where no meals supplied; pop. 22,845).

The town of Karnal is traditionally of great antiquity, being said to have been founded by Raja Karna, champion of the Kauravas, in the great war of the *Mahabharata*. It was seized by the Raja of Jind in the middle of the 18th century, and wrested from him in 1795 by the Irish adventurer George Thomas. It was conferred by Lord Lake in 1803 upon Nawab Muhammad Khan, a Mandil Pathan. A British Cantonment was maintained here until 1841, when it was abandoned, probably owing to the unhealthiness of the site, as the W. Jumna Canal, passing the city, intercepted the drainage and caused malarial fever. The canal has since been re-aligned. A wall 12 ft. high encloses the town. The former military Dairy Farm is now under the Imperial Agric.

Dept., for cattle breeding and agricultural instruction. There is fair small-game shooting near, and fine black buck shooting 20 m. to the W.

A large up-to-date hospital to accommodate 130 patients was erected in 1910-11 as a memorial to King Edward VII.

Karnal is famous as being the place where the Persian Nadir Shah defeated the Mughal Emperor Muhammad Shah in 1739. The battle lasted two hours, 20,000 of the Indian soldiers were killed, and a much greater number taken prisoners. An immense treasure, a number of elephants, part of the artillery of the Emperor, and rich spoils of every description fell into Nadir Shah's hands. The Persian loss is variously stated at from 500 to 2500 killed. The next day Muhammad Shah surrendered himself to his conqueror, who marched to Delhi, and after a massacre in the streets and a fifty-eight days' sack returned to Persia with a booty estimated at 30 to 70 million pounds sterling (see p. 290).

97 m. **Kurukshetra Jn.** Branch of 56 m. W. *viâ* Kaithal to Narwana on the line to Bhatinda (p. 351).

At 2 m. is **Thanesar** (D.B.) (pop. 4226), a famous place of Hindu pilgrimage and a very ancient town, near which Shahab-ud-din Ghori was defeated by and subsequently defeated the Prithvi Raja in 1192 A.D. It was formerly the capital of a Hindu kingdom ruling the S.E. portion of the Punjab, but is now mostly in ruins. The **Brahmsar Tank** lies about 1 m. W. of **Kurukshetra junction**, and is reached by passing through part of the town. It is an oblong sheet of water 3546 ft. in length, and is not only the centre of attraction to pilgrims, but also the haunt of innumerable wild-fowl from the pelican to the

snipe. It is surrounded by temples in every stage of decay, overshadowed by great trees, and flights of dilapidated steps lead down to the water on all sides. As many as 100,000 persons have been known to assemble here on the occasion of an eclipse of the sun, when it is believed that the waters of all other tanks visit this one here, so that he who bathes in it at the moment of eclipse obtains the additional merit of bathing in them all. On the W. a causeway stretches out to an island where, partly hidden by trees, the most perfect of the temples stands. The ruins of this causeway extend farther S. to the remains of other temples. The area round it is known to the Hindus as the **Dharmakshetra**, or the Holy Field, which was the centre of **Kurukshetra**, the great plain of the *Mahabharata* battle of the Kauravas and Pandavas (Introd. p. lxii). Traditionally the latter is 40 kos. (50 m.) in length, and extends W. to Pehowa and Kaithal, which are both sacred places. The **Kurukshetra** tract, containing the battlefield, is about 70 m. by 30 m. **Kurukshetra** is described in Sanskrit literature, and was named **Brahmavarta**, or land of divine sages, "fashioned by God and chosen by the Creator." On the Sarsuti, a mile N. of the town and a mile W. of the tank, and all round at various distances, are a number of sacred sites, some identified with places actually mentioned in the *Mahabharata*.

The **Town** is about $\frac{1}{4}$ m. N. of the tank, and beyond it are extensive remains of the Muhammadan Fort. The chief building of interest, and that in best repair, is the white-domed Tomb of **Shaikh Chilli**. It is an octagon of drab-white marble, lighted by trellis-work windows of fine design. It stands upon a small octagonal platform in the centre of a larger square one surrounded by cupolas.

In the centre of the W. side is a small pavilion with deep caves, which also forms a tomb.

S.W. from here, within a stone's throw, is a small mosque of red sandstone (the **Lal Masjid**), supported on eight columns. The carving on the domes and elsewhere is very beautiful, and resembles that at Fatehpur-Sikri. There are some fine trees in the neighbourhood.

Between Thanesar and Ambala are passed the Sarsuti (ancient Saraswati), Markanda, and other torrents issuing from the Siwaliks, and above Ambala the Ghaggar or Drishadvati.

The strip of country included between the Sarsuti and the Ghaggar is "the Holy Land" of the Hindu faith, the first permanent home of the Aryans in India, and the spot in which their religion took shape. Hence the sanctity of the waters of the Sarsuti, to which worshippers flock from all parts of India.

31 m. **Kaithal** is the headquarters of the subdivision and tahsil of the same name in the Karnal district (pop. 16,233). The town is picturesquely situated on the bank of an extensive artificial lake or moat, with numerous bathing places and flights of steps. During the time of the earlier Muhammadan Emperors it was a place of some importance. In 1767 it fell into the hands of the Sikh Chief Bhai Desu Singh, whose descendants, the Bhaïs of Kaithal, ranked among the most powerful of the Cis-Sutlej Chiefs. This territory lapsed to the British Government in 1843. The ruins of the old fort and residence of the Kaithal family stand out prominently on the high bank of the Bidkiar Lake, as it is called. A portion has been kept in repair, and is used as tahsil and police offices.

There is a civil R.H., which can be used with the permission of the Subdivisional Officer.

123 m. from Delhi, **AMBALA** Cantonment junction station. Headquarters of the Ambala Brigade Area, Lahore District. Ambala City and Civil Station * are 5 m. farther N.W. (total pop. 76,128). The important Cantonments were formed in 1843; they cover 7220 acres, and are laid out with good roads and fine trees. The centre is occupied by the bungalows of the residents, and to the W. are the military lines, and the whole is surrounded by extensive Maidans.

The Race-course is on the E. Maidan; **Paget Park**, a favourite resort, is on the N. There are various good European shops in the Cantonment. The city is a second-class municipal town, and the headquarters of the district and the Divisional Commissioner.

The Cantonment Church, which is in the Gothic style, was consecrated in 1857, and is one of the finest in India. There are also a Presbyterian and a Roman Catholic Church, a Hospital, Charitable Dispensary, and a Leper Asylum.

[For road journey to Peshawar, see *Ambala to Peshawar by Motor car*, by Lt.-Col. H. A. Newell (Lahore, 1917).]

162 m. **Kalka** station (D.B., R.), the terminus of the broad-gauge railway, 2400 ft. above sea-level. A few miles S.E. of Kalka is the old Mughal Palace of Pinjor, in picturesque gardens.

The mountain railway from Kalka to Simla, 60 m., follows the line of the old Tonga Road most of the way; it passes round the W. and N. sides of the Jutogh Hill, and reaches Simla on the N. side, the track being carried to the Stn. on the S. face of the Ridge by a tunnel. The gradient of nearly half the line is 1 in 33; there are 103 tunnels on it.

The fares to Simla from Kalka are Rs.2.1, Rs.11-3, and Rs.3-15.

Seats booked through the Stn. Master, Kalka. The journey up occupies nearly seven hours; down, under six hours. Only hand-luggage can be taken into the carriages. Rail motors with fixed timings also run during the season: fare, Rs.26 per seat; no heavy luggage allowed. Luggage may be sent in advance. It is wise to put on warmer clothing, at least at Solon, whenever the upward journey is made in the summer.

20 m., **Dharmpur** (D.B. good) in the territory of the Maharaja of Patiala, 4500 ft. The King Edward Consumption Hospital here is due to the initiative of Mr Malabari and the liberality of the Maharaja. Station for Kasauli (which can also be reached from Kalka by the old Simla road, now a bridle-path), Sanawar and Sabathu.

A good and well graded road goes up below Sanawar to

9 m. **Kasauli**. * A Cantonment and convalescent depot on the crest of a hill overlooking the Kalka Valley, and 6322 ft. above sea-level. The views from it are very grand and extensive. At Kasauli are the chief Pasteur Institute of India and the Central Research Institute. The Club is one of the best in Northern India.

The bridle-road continues on through *Kakarhatti*, *Sairi*, and *Jutogh* (see below) to Simla (41 m.).

3 m. off, across a dip, the road rises to **Sanawar**, which, however, is not quite so high as Kasauli. Here is the **Lawrence Royal Military School**. From it may be seen Dagshai and Sabathu, and in the far distance Simla. The ground was made over to the School in 1858, in fulfilment of the wish of Sir H. Lawrence. There are separate barracks for boys, girls, and infants, and a chapel. Soldiers' children of pure European parentage take precedence as candidates for admis-

sion; orphans have the preference over all others. The boys qualify for the service of Government in various Departments. The other Lawrence Schools are at Mount Abu (p. 211), Muree (p. 377) and Ootacamund (p. 643).

From Dharmpur another road leads N. 10 m. to the summer Cantonment of **Sabathu**, lying between the old tonga and bridle-roads. The next station,

24 m. **Kumarhatti**, serves the Cantonment of **Dagshai**. The railway now passes under the Barogh Ridge by a tunnel of 3750 ft., one of the longest in India, and runs high above the fine valley of the Giri, famous for its mahsir fishing, to the smaller Cantonment of

28 m. **Solon** (H. and D.B.), in the State of the Rana of **Baghat**, 4900 ft. It then turns N. and ascends the slopes high above Sabathu and until it reaches a level run round to

52 m. **Tara Devi**, passing under the bold cliffs of that peak. It then winds round the W. and N. faces of the **Jutogh Hill**, the **Tonga Road**, rising 1500 ft. up the S. face, through fine woods of pines and rhododendrons, and reaches

55 m. **Jutogh**, the fifth hill Cantonment served by it. Curving round the N. side of the hill the railway passes Summer Hill, and by a tunnel to Simla, 60 m. on S. of the Ridge. It has been continued $\frac{1}{2}$ m. farther East from the present terminus for goods traffic only.

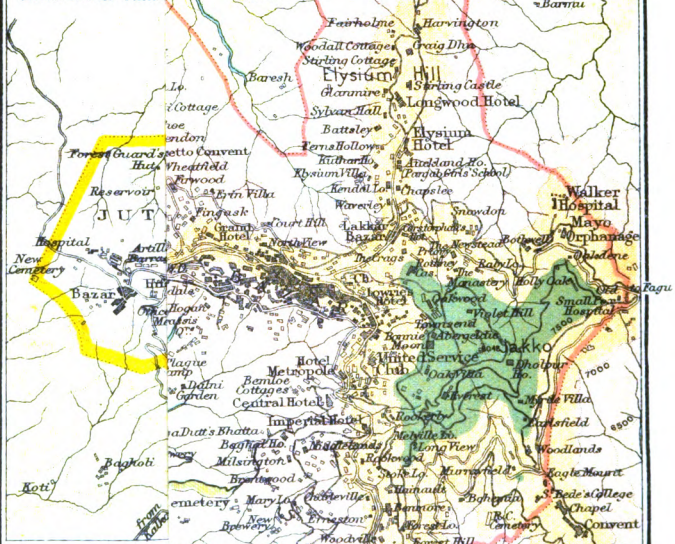
The hill resort of **SIMLA** * consists of the lofty (8048 ft.) mountain of Jakko to the E., which is connected with Observatory Hill and Prospect Hill on the W. by a long ridge. On the N. side of Jakko is Elysium Hill, so called in compliment to the sisters of Lord Auckland, who resided on it with their brother, and on the S. side the long slope of Chhota Simla, with the residence of the

SIMLA AND

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Cantonments outline



Governor of the Punjab at Barnes Court, leads through that quarter to the stream which drains the amphitheatre formed by the Mahasu range, and to Junga, capital of the Keonthal State. On the S. face of the Ridge, where it starts from the slope of Jakko, is the Indian bazar, and above this are the principal European shops, Christ Church, and the Town Hall. W. of these again are the Post Office and Telegraph Office. Above the main road, called the Mall, is the Grand Hotel, and below are the District Courts, and Westward of them large blocks of Government of India offices, including those of the Army Headquarters, near the railway terminus. Farther on again, on a rocky summit, known as "Gorton Castle," are large offices of the Government of India, below which is the Council Chamber of the Legislative Assembly. On the S. side is a link between the Mall and the Tonga Road, and on the N. side are the paths leading to Annandale (see p. 334). Half a mile farther W. again, past the Hotel Cecil, on the S., is Peterhoff Hill, on which the old Government House stands, with the office of the Foreign Department of the Government of India at its base. The Mall winds round this Hill to Observatory Hill, on which stands Viceregal Lodge, the ordinary summer residence of the Viceroy. It was first occupied in 1888 by Lord and Lady Dufferin during their last year of office. Since that year all the Viceroys have made it their summer headquarters, and various improvements have been effected. The Sessions of the Council of State are held in the Council Chamber, which was completed in 1913-14, to form an extended wing of the main building. Below Observatory Hill on the S. is Boileau-ganj. W. of Viceregal Lodge is Prospect Hill (7140 ft.), with

a grand view down to Sabathu and up to Kasauli; beyond it (3 m.) is Jutogh, and N. of it is Summer Hill. There are many beautiful walks round Jakko and some of the other hills; from the top of Jakko, famous for its fakir and the monkeys which haunt the temple, there are fine views of Chor mountain (10,000 ft.) to the S.E., and of the snows when the weather is clear. One of the prettiest walks leaves the Mall near the S. approach to the U.S. Club (which stands over the Combermere ravine running down the W. face of Jakko to the S. side of the Ridge), and winds down the lower slopes of the Chhota Simla spur as far as Bishop Cotton's school. Snowdon, the residence of the Commander-in-Chief, the Walker Hospital, founded by Sir James Walker, C.I.E., and the Mayo Orphanage, are on the Mall on the N. side of Jakko, and the Convent schools are situated at the S.W. corner.

The land upon which Simla stands was retained by the British Government as a sanatorium at the close of the Gurkha War in 1815-16, when most of the surrounding district was given or restored to various States. Lieutenant Ross erected the first residence, a thatched wooden cottage, in 1819. His successor, Lieutenant Kennedy, in 1822 built a permanent house.¹ Other officers followed the example, and in 1826 Simla became a settlement. In 1829 Lord Amherst spent the summer there, and from that date the sanatorium grew rapidly in favour with Europeans. Since the Viceroyalty of Sir John Lawrence in 1864 Simla has been the summer capital of the Government of India. As soon as the hot weather sets in, at the end of March, the Viceroy and the Officers of the Supreme Government quit Delhi for Simla, which is largely deserted in the

¹ Mr E. J. Buck's *Simla, Past and Present* (2nd ed., 1925), may be consulted.

winter,¹ though several of the Army Headquarters Offices now remain there all the year round.

The distances at Simla, taken from Christ Church, are—Round Jakko, 5 m.; Boileauganj, 2½ m.; to the end of Chhota Simla, 2 m.; round Elysium Hill, 2½ m.

Annandale is a fairly extensive plain, in a valley 1200 ft. below the Ridge on the N.W. of the station. The *Race-course* surrounds it, and it contains *Gardens* and the *Cricket Ground* and some very fine deodar-trees. W. again of Annandale is the *Glen*, a charming wooded valley with some grassy slopes and fine timber.

Mashobra and **Mahasu** (5 m. and 8 m. from Simla) are pleasant places. The Viceroy has a summer retreat at Mashobra, where there is a good hotel; another hotel at Mahasu. 8 m. beyond Mashobra is *Naldera*, a fine wood of deodars with a picturesque timber temple, from which a glimpse of the Sutlej may be obtained 5000 ft. below.

A magnificent view of the snows E. of Kulu is obtained from **Narkanda** (9600 ft.) and from the *Bhāgi Forest* beyond it. The stages of the route, each (except Mahasu) with a D.B., are as follows:—

Name of Stage	M.	Above Sea-level
Mahasu from Simla	8	8200 ft.
Fagu	12	8200 „
Theog	17	7700 „
Matiana . . .	28	7720 „
Narkanda . . .	39	9500 „
Kotgarh . . .	49	6000 „

Three marches up the Sutlej Valley from Narkanda is Rampur, from which the fine wool used in Rampur *chadars* used to come. 70 m. beyond Rampur is Chini,

E. of which two routes crossing the Shipki and Sholarang Passes lead to the uppermost course of the Sutlej and Gartok (14,200 ft. high). The track has been improved, and is a fairly passable route for trade with Tibet.

The Superintendent of Hill States has published a statement of rates of hire authorised in the case of Government transport on principal routes within the Simla District. (1) The rate for a mule is Rs.2 per stage, and R.1 a day for halts; (2) for a riding-pony, Rs.4 per stage and Rs.2 a day for halts; (3) for a rickshaw apart from the coolies, R.1, ans. 8 per day; (4) if coolies are taken more than one march out of Simla, half rates are payable for the return journey; (5) if coolies or mules are engaged through a *Chaudhri*, the following sums are due as commission—(a) coolies, an. 1 per stage, (b) mules, as. 4 per mule for the entire journey.

On the *Hindustan-Tibet Road*, from Simla to Rampur and on to Shipki, the distances are as follows (5 m. or less are half a stage; 6 m. or more are one stage):—

	Miles.
*Simla to Kufri (P.W.D., R.H.) .	8
Kufri to *Fagu (D.B.)	4
Fagu to Theog (D.B.)	5
Theog to Matiana (D.B.) . . .	11
Matiana to Narkanda (D.B.) .	11
Narkanda to Kotgarh (D.B.) .	10
Kotgarh to Nirat (P.W.D., R.H.)	10
Nirat to Rampur	13
Rampur to Gaora	7
Gaora to Sarahan	10
Sarahan to Taranda	14
Taranda to Paunda	5
Paunda to Nachar	5
Nachar to Wangtu	3
Wangtu to Urni	10
Urni to Rogi	10
Rogi to Pangi	10
Pangi to Rarang	8
Rarang to Jangi (P.W.D., R.H.)	7
Jangi to Kanam	10
Kanam to Siasu	10
Siasu to Poo	10
Poo to Namgia	11
Namgia to Shipki	10

¹ The population of Simla in midsummer was 43,907 in 1921, and is in midwinter about 26,430.

* Simla to Fagu the rate is R.1 as. 12 per coolie if hired in Simla, including the Chaudhri's commission.

There are other routes which can be taken, viz. — (1) Narkanda to Daranghati, 7 stages, 74 m.; (2) Narkanda to Luri Bridge, 1½ stages, 10 m.; (3) Simla to Rampur, 9 stages 2 half-stages, 96 m. (*viâ* Kotkhai and Jubbal); (4) Fagu to Rohru, 13 stages and 1 half-stage, 129 m. (*viâ* Mandhol); (5) Simla to Luri, 5 stages 3 half-stages, 49 m.; (6) Simla to Kalka, 5 stages, 58 m.; (7) Simla to Kalka (*viâ* Kasauli), 5 stages 1 half-stage, 43 m.; (8) Simla to Nalagarh, 7 stages 4 half-stages, 54 m.; (9) Simla to Bilaspur, 3 stages 2 half-stages, 50 m.; (10) Bilaspur to Kalka, 7 stages, 67 m.

There are R.Hs. or D.Bs. at only some of the places on these routes. A copy of the official statement of the rates, routes, etc., should be obtained and studied before starting.

Another route from Simla to Mussoorie, 151 m., is often taken an excursion in the hills. The following itinerary has been supplied by one who has taken it:—

Simla to Mussoorie (151 m.)

	Miles.	Feet.
Simla (7000 ft.) to Fagu (D.B.)	* 12	8200
Fagu to Sainj (B.)	. 8	4400
Sainj to Kotkhai (B.)	. 13½	5000
Kotkhai to Jubbal (R.H.)	. 14	6000
Jubbal to Arakot (F.B.)	. 17	3650
Arakot to Tiuni (F.B.)	. 9	3900
Tiuni to Kathian (F.B.)	{ Road, 12 } { Path, 9 }	6600
Kathian to Mundali (F.B.)	. 12	8200
Mundali to Deoban (F.B.)	. 12	9000
Deoban to Chakrata * (D.B.)	. 6	6900
(to bungalow)		
Chakrata to Churani, or Chaurani		
Pani (D.B.)	. 9	7200
Churani Panito Lakhwar * (D.B.)	. 12	3700
Lakhwar to Mussoorie (p. 423)	. 15	6500

All bungalows are furnished, but crockery, cutlery, and cooking utensils must be taken for use in the bungalows other than those marked * (D.Bs.). In the forest bungalows there are only beds and other furniture for two persons, and camp-beds, etc., should be

taken if the party consists of more than two.

The road is passable for riding-ponies all the way. Mules for transport (Rs.2 *per diem*) are obtainable through the Mule Contractor at Simla. Printed rates can be seen at the Cutcherry.

Bungalows at Sainj and Jabbal (Deora), which are in Hill States, can be occupied on application to the Supt., Hill States, Simla. Leave to occupy F.B.s at Arakot, Tiuni, Kathian, Mundali, Deoban, must be obtained from the Divisional Forest Officer, Chakrata.

A number of routes from Simla, in the neighbourhood, to Kashmir and in the Himalayas, will be found in Appendix III. of Mr E. J. Buck's *Simla, Past and Present*, with useful "Hints to Travellers in the Himalayas and Simla Hills."

Sultanpur (see also p. 350), the old residence of the Chiefs of Kulu, in the Kulu Valley (see *To Kulu and Back*, by M. C. Forbes), is approached by way of Simla; it is a long and somewhat tedious expedition, but the scenery cannot be surpassed for grandeur, and the forests abound in pheasants and other game. Farther up amongst the high peaks sportsmen will find ibex and bears. The marches from Narkanda to Sultanpur are indicated in a table on p. 336.

At Bajaura, 9 m. from Sultanpur, there is a stone temple, dedicated to Siva, with very fine carvings. Three niches in the outer wall contain bas-reliefs representing Ganesh, Vishnu, and Parvati slaying the demons. On both sides of the entrance are figures of the river goddesses Ganga (the Ganges) and Yamuna (the Jumna) (see *Archæological Survey Report* for 1909-10).

One march N. of Sultanpur is Nagar (p. 350), the headquarters of the Kulu Subdivision, and two marches Manali (6300 ft.) and Kothi (8000 ft.) farther on, through

the lovely scenery of the Upper Biás Valley, is the Rohtang Pass (13,200 ft.) into Lahaul.

At Manali is the wood-carved temple of the goddess Harimba, or Hirma Devi, once the patron goddess of the Kulu Valley, to

4 m. **Delhi-Shahdara.** 4½ m. S. of this and near the once flourishing market of Patparganj is the field of the Battle of Delhi, in which Lord Lake defeated the Mahratta troops under M. Bourquien on 11th September 1803 after a

MARCHES FROM NARKANDA TO SULTANPUR (see p. 335).

From	To	Height above Sea- level.	Accommodation.	Country.	Dis- tance.
Narkanda	Luhri	Feet 2500	G.B. Vil. on N. side of Sutlej	Descent of 6500 ft. in	M 12½
Luhri	Ani	4100	G.B. and vil. Salvation Army Fruit Farm and Mission.	Cross Sutlej, gradual descent for 5 m. and easy ascent for 6½ m.	11½ in all.
Ani	Khanág	8300	G.B. and vil.	Steep ascent	9
Khanág	Shoja	8800	G.B. No vil.	Cross Jalori pass at 10,500 ft.	7
Shoja	Banjár	5000	G.B. and vil., tahsil, thana, hospital, school	Descent all the way	10½
Banjár	Lárji	3100	Bungalow badly placed, accommodation poor, small vil.	Grand gorges of Biás, Sanij and Tirthan rivers; descent nearly all the way.	12
Lárji	Bajaura	3600	G.B. (with kha-nama), post and telegraph office	Up Biás River. gradual ascent	11
Bajaura	Sultanpur	3994	G.B., hospitals for men and animals, thana, tahsil, R.H. and D.B., post and telegraph office	Gradual ascent up Biás River	9

Note.—G. B. = good bungalow. See p. 335.

whom human sacrifices used to be offered only a few generations ago.

(2) **Delhi to Lahore via Ghaziabad.**

On leaving Delhi Central Station,

The line crosses the Jumna by a bridge of 12 spans of 211 ft. It was opened on 1st January 1867, and cost Rs.629 per lineal foot.

brief but severe fight. An obelisk on the spot commemorates the officers who fell in the engagement.

Light ry., Shahdara, 93 m. N. to Saharanpur (p. 339).

13 m. **Ghaziabad junction station.** From this point the E.I.R. runs S.E. to Allahabad and Calcutta (Route 21), and (Oudh and Rohilkhand section) E. to

Moradabad (100 m.) (Route 20). Near this place, then called Ghaziud-din-nagar, the small force under Brigadier-General Archdale Wilson twice defeated the Meerut and Delhi mutineers on 30th and 31st May 1857.

41 m. from Delhi, Meerut city station. 308 m. from Lahore. (By road, 42 m. to Delhi; 81 m. to Aligarh; 14 m. to Sardhana; 65 m. to Roorkee; 32 m. to Bagpat, on the Jumna.) Petrol and motor accessories obtainable.

43 m. Meerut Cantonment *, (D.B.) (combined population 122,609). This Cantonment is the hdqrs. of a first-class military district and also of the 3rd Cavalry Brigade. It is known in history as the scene of the outbreak of mutiny of the Indian army (on Sunday, 10th May 1857). The trouble began with the 3rd Bengal Cavalry (eighty troopers of this regiment having been imprisoned and degraded the previous day for refusing to receive cartridges of the old pattern). It was intended to ensure the murder of all the Europeans of the place while at evening service, but the plan miscarried by a happy accident. A number of officers and others were, however, murdered, and most of the houses of the S. Cantonment were burned; and finally the mutineers (consisting of the 3rd Bengal Cavalry and the 11th and 20th Bengal Infantry) were allowed to march off to Delhi unpursued. The English force in Meerut consisted of the 60th Rifles, the Carabineers, and one battery of Horse Artillery, and of Foot Artillery, as against about 2500 sepoys and sowars. Had General Hewett, who was nearly seventy years of age, acted with any sort of decision or promptitude, the rising could have been checked, but he did nothing.¹

¹ Every one should read the story of the Mutiny of Meerut, as told in Colonel A. R. D. Mackenzie's *Mutiny Memoirs*.

The station is very extensive, measuring $3\frac{1}{2}$ m. from the railway on the W. to the police lines on the extreme E., traversed by the Mall, one of the finest in India, and 3 m. from where the Bulandshahr Road, on the S., leaves the station, to the end of Church Street. The European Cavalry Barracks are of remarkable extent. As in 1857, these and the other British Barracks lie to the N. of the Church, and the lines of the Indian troops to the S.

St John's Church, completed 1821, in the Italian style, was the first Church erected in the Upper Provinces of India. There are tablets in it to a great number of officers who have been killed in action or have died in Upper India.

The large Cemetery, which lies to the N.W. of the Church, is divided into two parts—the new being marked by crosses and English tombs, the old by cupolas and pyramids. The pillar, 50 ft. high, was erected to Sir R. Rollo Gillespie, who subdued the mutiny at Vellore (p. 609), and fell in the Gorkha War. Sir D. Ochterlony, who joined the Bengal Army in 1777 and died in 1825, after 48 years' continuous residence in India, is also buried here.

The site of the old Central Jail, (now abolished) is occupied by the Victoria Park, in which there is a 9-hole golf-course.

Temples. — The *Suraj Kund*, commonly called by Europeans the "Monkey Tank," filled by water from the Ganges Canal, lies to the W. of the Jail. It was constructed by Jowahir Mal, a wealthy merchant of Lawar, in 1714. There are numerous small temples, dharmshalas, and *sati* pillars on its banks. The *Baleswar Nath Temple* is the oldest in the District, and dates from before the Muhammadan invasion. The

Darga of Makhdum Shah Wilayat, standing near the Collector's office, is said to have been built by Shahabu-d-din Ghorî. The *Darga of Shah Pir* is a fine structure of red sandstone, erected in 1628 A.D. by Nur Jahan, in memory of a pious fakir of that name. The *Jami Masjid* is said to have been built in 1019 by Hasan Mahdi, Wazir of Mahmud Ghaznavi, and was repaired by Humayun. The *Makbara* of Salar Masa-ud Ghazi is supposed to have been built by Kutb-ud-din Aibak in 1191. There are two large *Imambaras*—one near the Kamboli Gate and another in the Zabidi Mahalla—an *'Idgah* on the Delhi Road, built in 1600, and a mosque built by Nawab Khairandesh Khan in the Saraiganj. Besides these there are 62 mosques and 60 temples in the city, but none of them deserve any particular notice.

Before reaching Sardhana the Ganges Canal, made by Sir Proby Cautley, is crossed.

51 m. **Sardhana** station (D.B.) is connected with Walter Reinhardt, of Walloon origin, known as Samru, or Sombre, from his swarthy complexion, who came out to India in the French service, about 1750. He became leader of a band of European deserters and sepoys, whom he brought to an unusual state of discipline; and after serving under several Chiefs, he joined one Gregory (Gurgin), an Armenian, who was high in the favour of Mir Kasim,¹ the Nawab of Bengal. It was after the fall of Monghyr (p. 472) that he did his employer the base service of putting to death, on 6th October 1763, all the 60 English gentlemen and 100 others, all prisoners, who had been collected at Patna (p. 65). He next joined the Bharatpur Chief, and from him finally went over to Najaf Khan, from whom he re-

ceived a grant of the Pargana of Sardhana, then valued at 6 lakhs a year. He died at Agra in 1778, and his Begam, originally a Kashmir dancing-girl, was recognised as his widow, and succeeded to his domains. She became a Roman Catholic in 1784, and married a French adventurer named Le Vaisseau (1792), who, having shown himself incompetent, was induced to commit suicide. The revolt which he had caused was quelled by the aid of the Irish adventurer, George Thomas. On the death in 1802 of Zafaryab Khan, the son of Samru by another wife, the Begam gave his daughter in marriage to Colonel Dyce, her manager, and their son, David Ochterlony, Dyce Sombre, in 1840 married the Hon. Mary Jervis, daughter of the second Viscount St Vincent, afterwards Lady Forester. The fief of Sardhana was placed under British protection in 1805 and lapsed to the E.I. Company upon the Begam's death in 1836. According to Major Thorn, who saw her in 1806: "She appeared to be about fifty-three years of age, of middling size and fair complexion. She was a constant attendant at headquarters, dressed in the European style with a hat and veil, sometimes riding in a palanquin, and at other times on a horse or an elephant" (*Memoir of the War in India*).

E. of the town is a modern English mansion, built 1834, and called the Palace, with a grand flight of steps at the entrance. It stands in a garden of 50 acres, and is commonly known as the **Kothi Dilkusha**. The house was sold in 1893 for Rs.25,000 to the Roman Catholic Mission at Agra for use as a School and Orphanage. At Government House, Allahabad (p. 50), are portraits of the Begam in her old age (by W. Melville of Delhi) and of Dyce Sombre wearing his papal decorations; also pictures of the Begam presenting a

¹ Less fortunate than Samru, Mir Kasim died a beggar in Delhi, his last shawl being sold to defray his funeral expenses.

chalice to the clergy at Sardhana and of her meeting with Lord Combermere after the fall of Bhurtপুর in 1826. These were formerly in the palace; other pictures from the collection are in the Indian Institute at Oxford.

The **R.C. Cathedral**, built by the Begam Samru, is outside the town on the S. It is an imposing building, standing in an enclosure, surrounded by an ornamental wall. By the side entrance, on the right, is the Begam's white marble monument, made at Rome. Close by is the **R.C. College**, a low masonry house, which was once the Begam's own residence. It is intended for the instruction of Indian priests, and was endowed by the Begam. There are twenty pupils, taught by the Italian priest and his curate.

111 m. from Delhi, *viâ* Ghaziabad, is **Saharanpur** junction station * (R., D.B.). Pop. 62,261, including a large railway settlement. From Saharanpur the O. and R. section of the E.I. Ry. runs S.E. to Lucknow and Benares (Route 20). Passengers change here for Dehra Dun and Mussoorie (*viâ* Lhaksar jn.) and also for Naini Tal (*viâ* Bareilly jn. and Kathgodam). Saharanpur is, by road, 43 m. from Dehra Dun, and 77 m. to Chakrata.

The town was founded in the reign of Muhammad Tughlak about 1340, and named from Shah Haran Chishti, whose shrine is still much visited by Muhammadans and Hindus also. It was a favourite place of summer resort of the Mughal court. In the reign of Shah Jahan a royal hunting-seat, called Badshah Mahal, was built by 'Ali Mardan Khan, the projector of the **Eastern Jumna Canal**. The canal was neglected during the decline of the Mughal Empire, and was never of much utility till the District came under British rule,

when Sir P. Cautley (1802-1871) reconstructed it, and since then cultivation has spread on every side. In 1857 the station was successfully held by the Collector, Mr Spankie, with assistance afforded him from Ambala.

There are an Anglican Church, consecrated in 1858, and an American Presbyterian Church, and a mission from that body. An old Rohilla fort is used as a Jail. A handsome modern mosque has been erected on the plan of the Jami Masjid at Delhi. The **Government Botanical Gardens**, which attained their centenary in 1917, form the main attraction of the place. Many valuable plants have been acclimatised as well as a large number of English vegetable seeds, which together with flower seeds are produced in large quantities for sale to the public. Fruit-trees are propagated and distributed throughout India, and the gardens contain a valuable collection of fruit trees. Near the E. gate is the fruit garden known as the *Alsi Bagh*. The Garden Supt.'s office is near the pot nursery. There are also a Hindu temple and wells in the gardens, and the S.E. gate leads to some *sati* monuments and *chhatris*. There is also a **Remount Depot**.

Saharanpur is celebrated as the station whence the **Trigonometrical Survey** of the Himalayas was commenced. The snowy peaks add much sublimity to the view to the N.

162 m. from Delhi, *viâ* Ghaziabad, is **Ambala** Cantonment station (p. 331).

179 m. **Rajpura** junction station (D.B.). From here a branch line runs S.W. 108 m., to Bhatinda, past 16 m., Patiala, and 32 m., Nabha, the capitals of the two Jat Sikh States so named. These two,

with Jind, form the three Phulkian States of the Malwai Sikhs, who lie S. of the Sutlej, the Manjha Sikhs occupying the Bari Doab across that river. All three States rendered loyal assistance during the Mutiny of 1857, and received accessions of territory.

Patiala is the capital of the wealthiest and most populous State in the Punjab extending over an area of 5392 sq. m., with a pop. of nearly $1\frac{1}{2}$ millions and an annual revenue of $1\frac{1}{2}$ crores. The Palaces of the Maharaja in the Baradari Gardens and at Moti Bagh, the Mohindar College, the Fort, the Temple of Mahakali and Rajeswari, the Hospital, Waterworks, and King Edward Memorial, are the chief buildings and sights of interest. The residential quarter is well laid out, and there are fine cricket and polo grounds. The Maharajadhiraja, His Highness Major-General Sri Sir Bhupindar Singh Mahindar Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., was born in 1891 and succeeded his father in 1900. The Indian State Forces, furnished by the State, include 1219 infantry and 608 cavalry. All these troops were sent to the front to take part in the War.

Jind, the second of the Phulkian States, has an area of 1259 sq. m., with a pop. of 308,183 and an annual revenue of 28 lakhs. Jind town is a junction on the Delhi-Bhatinda-Lahore line (p. 351), but the capital is Sangrur, on the Ludhiana - Jakhal Railway (p. 342). Its principal buildings are the Diwan Khana, the Baradari, the State Library, Skating Rink, Ranbir Silver Jubilee Orphanage, Lady Minto Ranbir Girls' School, and Victoria Golden Jubilee Hospital : also a D.B. Lieut. - Col. H.H. Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C.I.E., K.C.S.I., received his full powers in 1899. The Indian State Forces, which

number 700, saw much active service during the War.

The third of the Phulkian States, **Nabha**, covers an area of 928 sq. m., with a pop. of 263,334, and an annual revenue of $23\frac{1}{2}$ lakhs. Nabha town contains little of interest besides its four gardens. The Maharaja abdicated in 1923, and the State is under British administration.

From Nabha the line runs W. to Bhatinda (p. 351), and is crossed at Dhuri by the line from Ludhiana (see p. 342) to Jakhal.

195 m. from Delhi on the main line, is **Sirhind** station. The name of this town was formerly applied to a very extensive tract, which included the Ambala District and the States of Patiala, Jind, and Nabha. In Cunningham's *Archæological Survey* (ii. 205) a very interesting account of it will be found. Many Afghan Princes of Shah Shuja's family and other Muhammadans of note are buried here.

It is mentioned by Ferishta as the most Eastern possession of the Brahman Kings of Kabul. After they were conquered by Mahmud it became the frontier town of the Moslems, whence its name of Sirhind, or Sar-i-hind, "Frontier of Hind." It must have been a place of importance as long back as 1191 A.D., when it was taken by Shahab-ud-din Ghori, and besieged by Rai Pithora (Prithvi Raja) for thirteen months. At that early date it had a separate governor.

During the century and a half that intervened between the accession of Akbar and the death of Aurangzeb Sirhind was one of the most flourishing cities of the Mughal Empire. Many tombs and mosques are yet standing, and heaps of brick ruins surround the old city for several miles. In 1709 the city was taken and plundered by the Sikh Chief Banda, who put

the governor, Wazir Khan, to death in revenge for the murder of Guru Govind's mother and children. In December 1763 Sirhind was taken and totally destroyed by the Sikhs. The finest and oldest building is the

Tomb of Mir Miran. This is of stone, and is surmounted by a large central dome on an octagonal base, with a smaller dome at each of the four corners on a square base. Each of the four sides is pierced by a recessed doorway with a pointed arch covered by a second loftier and larger arch. The dead walls are relieved by squares of blue enamelled tiles. The general effect is decidedly good, and altogether this tomb is one of the most pleasing and perfect specimens of the later Pathan architecture.

The **Largest Tomb** is a plain brick building, attributed to Saiyid Khan Pathan. At the four corners are very small turrets, which look mean beside the lofty central dome of 40 ft. diameter which crowns the building. The next tomb in size is another red brick building, attributed to *Khoja Khan*. The great dome is 36 ft. in diameter outside. This building is probably of the 15th century. There is a pretty little octagonal **Tomb of Pirbandi Nakshwala** (or the painter). It is on open arches, and is surmounted by the pear-shaped dome of the Mughal period. The body of the building is profusely covered with paintings of flowers, and the roof with glazed tiles, arranged so that the melon-like divisions of the dome are marked by dark blue lines, and the intervals by coloured tiles laid herring-bone fashion, beginning with yellowish pale green at the top, and ending with dark green at the bottom. The only mosque worth mentioning is that of *Sadan Kasai*, to the N. of the present town. The W. end has fallen

down. The centre space is covered by a dome 45 ft. in diameter.

The *Haveli* or mansion of Salabat Beg is perhaps the largest specimen of the domestic architecture of the Muhammadans of the Mughal Empire. It consists of two great piles of brick, each 60 ft. sq. and about 80 ft. high, connected by high dead walls.

The great *Sarai* of the Mughal emperors is to the S.E. of the city. It is now used as a public audience-hall by the Patiala authorities, and is called the *Amkhas*.

Beyond Sirhind at Doraha the railway crosses the **Great Sirhind Canal** (opened in 1882), one of the largest irrigation canals in the world. It draws its water from the Sutlej at Rupar, and, passing through Ludhiana and Patiala, with side branches to Nabha, Jind, and other States of the Punjab, eventually irrigates the S. half of the Ferozepore District. At Rupar, which is the terminus of a branch line, 33 m. from Sirhind, Lord Wm. Bentinck had a famous meeting with Maharaja Ranjit Singh in October 1831.

232 m. Ludhiana junction (D.B.).

A municipal town and headquarters of a District of the same name, situated near the S. bank of the Sutlej, 8 m. from the present bed of the river. It is a great grain market, and famous for its shawls made from Pashmina wool, also for the manufacture of Rampur *chadars*. The Fort lies to the N.W. of the city, and under it is a **Shrine of Pir-i-Dastgir**, or 'Abdul Kadir Gilani. It has been temporarily made over to the Salvation Army, who have opened an Industrial School called the "Sir Louis Dane Weaving School."

Ludhiana was founded in 1480 by two Princes of the Lodi family. In 1809 General Ochterlony occu-

pied it as Political Agent for the Cis-Sutlej States, and from 1834 to 1854 the town was a military station. The **Church and Public Gardens** are to the S. of the city. An old cemetery dates from 1809. There has been an American Presbyterian Mission here since 1840.

The N. India School of Medicine for Indian Women at Ludhiana, where Indian women can qualify themselves for the post of sub-assistant surgeon, is the only school of the kind in the Punjab. The school is managed by the Medical Missionary Society.

Three of the great battles of the First Sikh War were fought between Ludhiana and Ferozepore—viz., Mudki, Ferozeshah, and Aliwal. The first two are noticed at p. 354. **Aliwal** lies 16 m. W. of Ludhiana, and must be reached by riding. In the battle here Sir Harry Smith, with a force of 10,000 men, defeated a body of 20,000 Sikhs under Sirdar Ranjodh Singh, who had slightly worsted him a week previously at Badowal. An *Obelisk* bears the inscription, "Aliwal, 26th January 1846," repeated in Persian and Gurmukhi.

Ludhiana is an important junction on N.W. Railway for the three lines—Main Line, Ludhiana-Ferozepore Cantonment (p. 353) (77 m.), and Ludhiana-Dhuri-Jakhal-Hissar (131 m.).

27 m. from Ludhiana on the Jakhal branch is **Maler Kotla**, the capital of the Muhammadan State of that name (area 168 sq. m., pop. 80,332, annual revenue 14 lakhs). The Nawab, Lieut.-Col. H.H. Sir Ali Ahmad Khan Bahadur, K.C.S.I., K.C.I.E., who is of Afghan descent, was born in 1881 and succeeded in 1908.

49 m. on the same branch line is **Sangrur**, the capital of the Jind State (p. 340)

241 m. **Phillaur**. Beyond the Sutlej, crossed by a fine bridge, of which it was necessary to sink the foundations to an extraordinary depth, is the old Mughal Sarai and Sikh Fort of Phillaur, now used as a Police Training School. It was just saved from the mutineers in May 1857 by the despatch of British troops from Jullundur, and was held successfully when the sepoy regiments in that station mutinied on 17th June. The civil authorities in Ludhiana did all in their power to prevent the mutineers crossing the Sutlej, Mr T. H. Thornton (C.S.I.), an Assistant-Commissioner of a few weeks' standing, cutting the bridge of boats, and Mr G. H. M. Ricketts, C.B., the Deputy-Commissioner, boldly facing them with a few of Rattray's Sikhs; but the mutineers got past them, and, after looting the Ludhiana station, went on to Delhi.

265 m. **Jullundur Cantonment** station, * (D.B.). Branch, 24 m., to Hoshiarpur. A municipal city, Cantonment, and headquarters of a Division and District. The city (station 3 m. farther N.) has with the Cantonment a population of 71,008, of whom the greater number are Muhammadans. Anciently it was the capital of the kingdom of Jalandhar, or Trigarta, which, after the Muhammadan invasion, survived in the Hill State of Kangra (see p. 349). Hiuen Tsang, the Chinese pilgrim of the 7th century A.D., describes the town as 2 m. in circuit; now two ancient **Tanks** are all that are left of this. Under the Mughal Empire it formed the capital of the country between the Sutlej and the Bias. The modern city consists of a cluster of wards, each formerly surrounded by a wall. There is a fine **Sarai** built by Karam Bakhsh.

The **Church**, $\frac{1}{2}$ m. W. of the artillery lines, erected in 1852, is

a long building without any tower. The American Presbyterian Mission maintains an excellent school.

The Cantonment, which is considered a healthy one, was established in 1846, and has an area of $7\frac{1}{2}$ sq. m. The garrison consists of one British Infantry Regiment, two Indian Infantry Regiments, and a Battery of Field Artillery. Though a British Regiment (the 8th King's) and a Battery of Artillery were present here in May 1857, and though the Phillaur Fort was secured by the former under the orders of Brigadier Hartley, no steps were taken by Brigadier-General Johnstone, who had succeeded Hartley before the actual outbreak occurred, to disarm the 36th and 61st Regiments of Bengal Infantry, and when these mutinied on 7th June and started for Delhi, no pursuit of them was ordered until it was too late.

The Public Gardens in the military Cantonment are well laid out.

12 m. from Jullundur City, on a line which runs through Lohian Khas to Ferozepore Cant., is **Kapurthala**, the capital of the Sikh State of that name, which can also be reached by a good road 15 m. N.W. from Jullundur City. Lt.-Col. H.H. Maharaja Sir Jagat Jit Singh Bahadur, G.C.S.I., G.C.I.E., who was born 1872, succeeded 1877, and was invested with full powers in 1890. He was, in 1926, one of the representatives of India at the Assembly of the League of Nations. The State proper covers 630 sq. m., with a pop. of 284,000 and an annual revenue of $37\frac{1}{2}$ lakhs. The Maharaja is also one of the largest *talukdars* (land-holders) in Oudh. The Indian State Forces number 603 (infantry), and did good service in the European War.

287 m. to 290 m. Between **Dhillwan** and **Blas**, the river of that name is crossed.

316 m. **AMRITSAR** junction station * (D.B.), about $\frac{1}{4}$ m. W. of the city. A branch line from here goes N.E. 67 m. to Pathankot for Dalhousie, etc. (see p. 347). Another branch line goes S. 56 m. to Tarn Taran and Kasur. A third runs N. to Narowal, 40 m. (for Sialkot and Jammu) and opens access to the Sikh shrines at Kartarpur and Dera Baba Nanak (p. 347).

Amritsar is a city with a population of 160,218, and the hdqrs. of a District. It is the wealthiest next to Delhi, and, after that place and Lahore, the most populous city of the Punjab and the religious capital of the Sikhs. It was founded in 1577 by Ram Das, 4th Guru of the Sikhs, upon a site granted by the Emperor Akbar around a sacred tank, from which the city takes its name, "Pool of Nectar." Ahmad Shah Durani destroyed it in 1762, blew up the temple, and defiled the shrines. This was the last occasion on which the temple was interfered with: it was rebuilt in 1764. After Ahmad Shah's retirement the city was divided amongst the various Sikh Chiefs, to each of whom was assigned a separate ward; but it gradually passed into the power of the Bhangi Misl, who remained supreme till 1802. In that year Ranjit Singh seized it, and roofed the great shrine with sheets of copper gilt; hence it was called the Golden Temple. He also built in 1805-09 on the S.W. the Fort of Govindgarh in order to overawe the pilgrims, and surrounded the city with a massive wall, the greater part of which has been demolished since the British occupation.

The manufactures for which Amritsar is most famous are those of Pashmina, silk, and carpets. (Pashmina is the name of any fabric made from the fine wool of a breed of goats found in and beyond the Himalayas). Pashminas are either plain self-coloured cloths

made up into lengths which can be cut as required, or are woven into plain or embroidered shawls, some of which are known as Rampur chadars. This industry at one time employed 4000 looms, but it has declined and has been succeeded in importance by the carpet industry, also more flourishing some years ago than it is now. In the carpet industry Kashmiris and Punjabi Muhammadans are chiefly employed. There are four large carpet factories in the city and excellent carpets are turned out. The manufacture of silk piece-goods is still carried on to a certain extent.

Gold and silver thread, ribbon, spangles, etc., for embroidery, are also manufactured. Ivory carving is practised with considerable success, but is chiefly confined to combs, paper-knives, card-cases, and toys.

The materials for these manufactures are, in a great measure, brought from all parts of Central Asia, and the merchants who bring them—Kashmiris, Afghans, Nepalese, Bokhariots, Baluchis, Persians, Turcomans, Tibetans, Yarkandis, and others—may be seen in their national and highly picturesque costumes about the town, but more especially in the caravanserais. Besides the raw materials, they bring fine specimens of their own national manufactures and embroideries, which may be purchased from dealers in this town as well as in the other chief cities of India. Amritsar is also the depôt for piece-goods, copper, brass, etc., for the Central Asian markets.

The city has twelve gates, of which the only old one is that on the N. side facing the Rambagh. The direct road from the railway station to the Great Temple, called the Darbar Sahib, in the centre of the town, passes two of the large above-noticed modern **Sarais**, one

of the principal **Carpet Factories**, and several small mosques, and finally through a deep archway in the centre of the municipal buildings enters the **Kaisarbagh**, where stands a white marble statue of the Queen-Empress Victoria. Opposite the statue is the Saragarhi Memorial erected by the Indian Army to the memory of the small detachment of Sikh soldiers who fell, in 1897, defending the fort of Saragarhi against overwhelming odds.¹ At the entrance to the temple precincts, just beyond this, rises the **Clock Tower**, which overlooks the tank and the temple in the centre. The view from here is wonderfully picturesque. The road E. from the Clock Tower leads to the Jallianwala Bagh, where the troops fired on the mob in the 1919 riots. Before visiting the temple visitors formerly took off their boots and put on soft slippers. Visitors are now required to remove shoes and stockings, and to wash their feet. Consequently few visitors enter the temple. The Sacred Tank is surrounded by a tessellated pavement of white marble 24 ft. broad, with ribs of black and brown, brought from Jaipur. It is 470 ft. sq.² The buildings around it are called **Bungahs**, and are the hostels and chapels of great Chiefs who come to worship. To the N.W. of the tank is the **Takht Akal Bungah Sahib** (see p. 345), with a gilt dome. In the N.E. is the white bungah of the Chiefs of Patiala and Nabha, and beyond, to the E., are two pillars called the Ramgarhia Minars. A local guide by Sirdar Sundar Singh gives details.

The old system of management of the Darbar Sahib has given way in favour of a Central Committee for the management of this and other shrines in the Punjab. This Committee provides no special facilities for

¹ See p. 353.

² See Sir G. Birdwood's *Industrial Arts*.

visitors; and proper rules for visitors do not exist.

The **Golden Temple**, called by Sikhs and Hindus the Darbar Sahib, or the Harmandir, stands in the centre of the tank on a platform 65 ft. sq. It is approached from beneath an archway on the W. side by a white marble causeway 204 ft. long, flanked on either side by gilded standard lamps. Beneath the arch is a Memorial of the part taken by the 35th Sikhs in the Chitral Expedition.

Except for the lower part of the walls, which are of white marble, the whole of the building is encased in gilded copper, inscribed with verses from the *Granth Sahib*, written very clearly in the Punjabi character. It is entered by four doorways, one on each side, with doors plated with silver finely wrought. That on the N. side is the only one through which Europeans may pass. The scene within is most picturesque. The walls are richly gilded and painted with representations of flowers, etc. On the E. side is seated the high priest, either reading from a copy of the *Granth Sahib* on an ottoman before him, or waving a *chauri* over it, whilst pilgrims throw offerings of cowries, money, or flowers into a sheet spread in the middle of the floor to receive them, and then taking their places around it, sit down and join in chanting verses of the sacred volume to the music of stringed instruments.

On the roof above there is a small but richly decorated Shish Mahal, or pavilion, where it is said the Guru used to sit. The brooms kept to sweep it out are made of peacocks' feathers.

Returning to the gateway, which has doors covered with massive silver plates, a staircase will be found to lead up to the Treasury, in which is a large chest. This place has thirty-one pillars or poles of silver 9 ft. long and 4½ in. in

diameter, and four large ones. In the chest are kept three gilt maces, a *panka*, two *chauris*, all with gilt handles, a *canopy*, weighing 10 lb. of pure gold, set with emeralds, rubies, and diamonds, a pendant of gold, a coloured plan of the temple, and a magnificent diadem of diamonds with strings of pearl pendants, which used to be worn by Nau Nihal Singh. There is also a sort of gilt arch 6 ft. high. All these are used when the *Granth* is carried in procession. Permission to visit the Treasury must be obtained.

On the W. side of the small square facing the gateway is the **Akal Bungah**, with its gilt dome. This temple was built in the time of Arjan, the fifth Guru. A low staircase leads to a room with a projecting window. In the room is a gilt ark, on the floor of which are a number of things covered with a cloth; this is partly removed, and a large sword is taken out and shown. It is a falchion 4 ft. long and widening towards the end. It is said to be the sword of Guru Govind; a mace also is shown, which was wielded by one of the Gurus. In the ark are also the vessels for the initiation of new members into the Sikh brotherhood.

On passing round to the S. side of the enclosure, the **Temple Garden**, Guru ka Bagh, is reached. It is 30 acres in extent, and contains pomegranate, orange, and other fruit-trees, a tank called Kaulsar, and several small pavilions. At the S. end of the garden is the picturesque **Baba Atal Tower**. The lower room is richly painted with frescoes representing scenes from the life of Guru Nanak, a good and interesting example of modern Sikh art. A staircase leads up to seven galleries; there is then a wooden ladder which ascends to an eighth; the entire height of the building is 131 ft.

This tower is dedicated to Atal Rai, the younger son of Guru Har Govind, who is said to have been reproved by his father for raising the deceased child of a widow to life, on the ground that the supernatural powers ought to be displayed in purity of doctrine and holiness of life, and not in miracles. Thereupon Atal Rai said that as a life was required and he had withheld one, he would yield up his own, and so lay down and died.

Outside the Temple enclosure on the E. are the lofty plain **Ramgarhia Minars**. The one to the N. may be ascended. At the top there is a good view to the N.W., taking in a white temple to Siva at the extremity of the city, built by Sardar Tej Singh. To the N.E., at 1 m. off, **St Paul's Church** is seen peeping out among woods, close to the D.B. Govindgarh Fort appears to the S.W.

The return journey may be made by the Rambagh Gate of the city. To the left is the mosque of Muhammad Jan, with three white domes and slender minarets. Farther to the N. is the 'Idgah; and close to it is the mosque of Khan Muhammad. In front of the gate, and just across the railway, are the pretty **Rambagh Public Gardens** which are about 40 acres in extent. In the centre is a pavilion in which Ranjit Singh used to stop when he came to Amritsar. Before entering the gardens the Civil and Municipal Hospitals are passed.

The **Fort of Govindgarh** is a short distance to the S.W. of the city. It is usually garrisoned with a section of Artillery and a platoon of British Infantry. It was completed by Ranjit Singh in 1809, the fortifications being traced by the French officers in his service. Such names as *Ronde de l'Est* may be seen on the walls. In May 1857 it was secured by British

troops sent over from Lahore in ekkas.

Amritsar is within the Lahore Diocese and there is an English Church in the Civil Station and usually a resident chaplain in the winter. There is also a Roman Catholic Church. The principal Mission is that conducted by the Church Missionary Society. This Society maintains High Schools for Boys and Girls and a Hospital. The Zenana Bible and Medical Mission maintains the St Catherine's Hospital for Women.

2½ m. W. of Amritsar station, on the Grand Trunk Road, is the Khalsa College, which was founded in 1882. This is the National College for Sikhs and it is affiliated to the Punjab University in Arts and Science. It has a large staff, including an European Principal and two European Professors, and accommodates about 700 students, most of whom are residents in the College hostels. The Khalsa College was honoured by a visit from the Prince of Wales, now His Majesty King George V., on the 11th December 1905.

The other educational institutions in the station are:—the Government High School; the Muhammadan Anglo-Oriental High School; the Hindu Sabha High School; the Pandit Baij Nath High School; the Dayanand Anglo-Vedic High School; and the Government Clerical and Commercial School. There is a Government Hospital under the charge of a Civil Surgeon. The Amritsar Municipality also maintains a Dispensary and Hospital, known as the Princess of Wales' Hospital, of which the foundation-stone was laid by Lady Chelmsford on the 16th April 1917.

The city is now provided with a good water-supply. A sewage-disposal scheme has also been completed and Electric Power-station built.

The principal fairs held here are at the Baisakhi festival in

April and at the Diwali festival in November, both at Amritsar city. They are primarily religious gatherings, but gradually came to be utilised for the buying and selling of agricultural stock, and are now the best known and most largely attended fairs in the province.

15 m. to the S. of Amritsar is **Tarn Taran**, (D.B.), a place very holy to the Sikhs, through which a line runs to Patti and Kasur (p. 354).

The **Temple and Tower** are situated on the E. side of a magnificent tank, which is kept full of water from the Bari Doab Canal. This tank was made by Maharaja Ranjit Singh when he built the temple. Europeans are not admitted. The lower room of the temple has been handsomely painted with representations of trees, while the outside walls have paintings of gods and goddesses. The room has a corridor round it, on the S. side of which is the *Granth*, enveloped in silk wrappers, and fanned by an official with a *chauri*.

This place was the residence of the Guru Arjan, and is older than Amritsar; unlike the temples at that city, it has no writings on the walls. There is a small pavilion with open sides on the roof. The tank is said to possess miraculous powers to cure the lepers who can swim across it. At its N. corner is a tower built by Nau Nihal Singh.

The neighbourhood is famous as the stronghold of the Manjha Sikhs, and the former recruiting-ground for their army. It is still heavily recruited for military service. There is a leper asylum outside the town, and a suburb inhabited by those infected with the disease, from which it is said the Guru Arjan himself suffered.

346 m. from Delhi on the main N.W. Ry. line is Moghalpura.

The railway *workshops* are very extensive, covering 1590 acres, and employing over 11,500 men.

349 m. **LAHORE** junction (Route 16).

Amritsar to Dalhousie and the Kangra Valley.

34 m. N. of Amritsar on the branch to Narowal, is the town of **Dera Baba Nanak**, where the celebrated Sikh Guru, Baba Nanak, lived and preached. The golden temple here is very beautiful and well worth a visit.

At Amritsar passengers for Dalhousie, Chamba, Kangra, and Dharmasala change on to the Amritsar-Pathankot Branch.

45 m. from Amritsar, on this branch, **Gurdaspur**, headquarters of the district of that name.

16 m. W. from Gurdaspur, and connected by a driving-road, is **Kalanaur** (district R.H.), where is the monument to indicate the site of the buildings and gardens erected by the Emperor Akbar to mark the place where he was proclaimed Emperor and crowned on receipt of the news of his father's death. 7 m. farther on is Dera Baba Nanak (see above).

9 m. N.W. of Gurdaspur is the Trimmu Ghat of the Ravi, where Brigadier-General Nicholson defeated the Sialkot mutineers (p. 370) on 12th July. Four days later the remnants of them were attacked on an island in the river, and killed to a man.

67 m. **Pathankot** terminus station (R., D.B., and R.H.). 8 m. to the N., on the high bank of the River Ravi, is the picturesque Shahpur Kandi Fort, dating back to the 16th century, with a R.H. in one of the old towers. The Rajas of Pathan often rebelled against the Mughal Emperors.

Driven back in the hills, they settled at Nurpur, but still retained the clan name Pathanias. From Pathankot motor-cars proceed direct to Dalhousie, 52 m., or the journey can be broken at Dunera, 28 m., where there is a D.B. Single seat in car to Dalhousie, Rs.22-12; in bus, Rs.15-8; special car can be arranged. Motor services also from Pathankot to Palanpur, 78 m., for Kulu, *via* Guggal; and from Guggal to Dharmsala Cant.

A narrow-gauge ry., 103 m., which is in many respects a triumph of engineering, runs through the Kangra Valley from Pathankot to Jogindarnagar in the Mandi State and was opened for traffic at the end of 1928. By this route the journey to Dalhousie and Dharmsala has been materially shortened. At 53 m. is the Dhundni tunnel, 250 ft. long; the pilgrim track between Kangra and Jawala Mukhi winds along the hillside here, about 200 ft. above the ry. track. At 57 m. is the Daulatpur tunnel, 1000 ft. in length. At 59 m. is **Kangra** stn., which is separated from the town (p. 349) by a gigantic cleft in the hills; and just beyond is the bridge over the Reond Khad river, consisting of one steel arch of 180 ft.—the only one of the kind in India. The **Kangra Valley** possesses three important centres of Hindu pilgrimage in Jawala Mukhi, Kangra and Baijnath and large *melas* are held at these places and also at Palanpur (p. 350) and Dharmsala. The Mandi State covers an area of 1200 sq. m., with a pop. of 185,048 and an annual revenue of nearly 12½ lakhs. The Raja, Lieut. H.H. Jogindar Sen Bahadur, was born in 1904 and succeeded in 1913. Mandi City is 131 m. from Pathankot.

Dalhousie is a charming hill station and sanatorium, with a military Cantonment at Balun

(5500 ft.) and military locations at Ticca Spur, Mankot, and Banikhet. The population in the winter of 1921 was 1457; and in summer 3955. From Dalhousie a visit may be paid to **Chamba** (D.B.), the capital of the Hill State of the same name, which covers an area of 3216 sq. m., with a pop. of 141,867 and an annual revenue of nearly 8 lakhs. H.H. Raja Ram Singh, who was born in 1890 and succeeded in 1919, belongs to one of the most ancient Rajput houses.¹ The scenery is very fine, especially between Dalhousie and Chamba 20 m. distant across the Ravi), where the summer road passes at an average height of 8100 ft. for 6 m. through one of the most beautiful forests in the world. At 11 m. from Dalhousie, 9 m. from Chamba, is the "Marg," or green open space of the hamlet of Khajiar (6400 ft., D.B. and R.H.), a circle of green sward having a perimeter of 1 m., with a lake in the middle, in the midst of magnificent dark cedar forests (well worth a visit), under the slopes of Dain Kund (9160 ft.) from the summit of which a most splendid semicircle of snow-capped heights is to be seen—one of the finest views in the world. The lower or winter road is 21 m. (Chil, 12 m., and 9 m. to Chamba.)

The Chamba State, which comprises the Upper Ravi and part of the Chenab Valley, is very rich in ancient remains.² Chamba is a most Italian-looking town, on a plateau about 400 ft. above the river, with old temples, well worth seeing; it is lit by electricity, with electric fans in all public buildings. An interesting collection of ancient inscriptions, pictures, weapons, and other antiquities is contained in the State Museum, founded by the Raja

¹ See *Chamba State Gazetteer* (Lahore, 1910), Section B., History, pp. 41-117.

² See *Antiquities of Chamba State* (Calcutta, 1911), by Dr J. Vogel of the Archaeol. Survey of India.

Sir Bhuri Singh in 1908 and named after him (*Illustrated Catalogue*, by Dr Vogel, Calcutta, 1909). On the N. end of the *Maidan* (here called Chaugan) is the hospital named after Raja Sham Singh (died 1904 A.D.), and on the other end the Residency used for the accommodation of distinguished visitors. Opposite the Museum are the Presbyterian Church and the Mission House of the Church of Scotland Mission.

Intending visitors to Chamba should bear in mind that the place, being situated in the Ravi Valley, is very hot during June-August.

From Chamba roads branch off to Kashmir, to Pangi (over the Sach Pass), to Brahmaur, and on to Chamba Lahoul, and Kulu Lahoul. There are D.Bs. at Khajiar (closed for some months in the winter) and at Chamba. Travellers desiring information, as to routes, coolie hire, and accommodation should apply to the Chamba State Vakil, Dalhousie, or to the Assistant-Commissioner, Dalhousie.

Dharmsala (D.B.), the headquarters of the Kangra District, is reached (56 m.) by a good metalled tonga road from the railway station at Pathankot. At Nurpur¹ (ancient fort, with ruined temple), Kotla (29 m.), and Shahpur (40 m.), there are D.Bs. The road passes through very pretty, fertile, and well-watered country. The new Civil Station of Dharmsala, erected since the earthquake on the site of the old Gurkha Cantonment, at a height of about 4500 ft., is reached at 56 m. Thence the road is unmetalled and leads to the upper station and Gurkha Cantonment, which lies at an elevation of about 5500 ft. This is in the midst of fine forest trees, and overshadowed by the great rock wall of the Dhaula

Dhar, which rises to 16,000 ft. Above this, at Dharmkot, are the summer quarters of the American United Presbyterian Mission. In the centre of the upper station is the rebuilt Church of St John in the Wilderness, which, with the entire station, was destroyed in the earthquake of 1905. In the churchyard is the tomb of the eighth Earl of Elgin and Kincardine, Viceroy 1862-3, who died here while on tour. It was very badly damaged in the earthquake, but has since been restored.

Above the upper station one of the main spurs of the **Himalayas** rises steeply to a height of 16,000 ft. to 17,000 ft. The scenery is grand and imposing, the great granite mountains appearing almost to overhang the station, while the view S.E., S., and S.W., over the rich and lovely Kangra Valley and the Sewaliks and intervening foot-hills, fading from purple to mauve in the distance, is one of extreme beauty. The River Biás, which runs through the District, and is renowned for its mahseer fishing, can be seen when the atmosphere is clear.

15 m. S. of Dharmsala and 53 m. from Pathankot by the new Kangra Valley Ry. (see p. 348) is **Kangra** (2500 ft.), anciently known as Nagarkot, which occupies both slopes of a hill overlooking the Banganga torrent. The name Kangra properly belongs to the ancient Rajput fort, which crowns a precipitous rock, rising sheer above the Banganga, and dominates the whole surrounding valley. The temple of Devi Bajresri, on the northern declivity, ranks amongst the oldest and most wealthy shrines in India, but both it and the fort were destroyed in the earthquake: the temple has been rebuilt: the fort is still in ruins. This temple is mentioned in Ferishta's account of the fourth invasion of India by Sultan

¹ On the ruined temple in the fort, see *Arch. Survey, Ann. Rep.*, 1904-5, pp. 110-120.

Mahmud, A.D. 1068, who sacked it, and again in A.D. 1360 it was plundered a second time by the Emperor Firoz Tughlak. The headquarters of the District were removed from Kangra to Dharm-sala in 1855.

Some 21 m. S.E. of Dharmsala is the pretty little settlement of **Palanpur**, the centre of the Kangra tea plantations of 10,000 acres. 9 m. E. again are the interesting temples of **Bajjnath**, (see Fergusson's *Ind. Arch.*, 1, 297-301), and from here a road leads to Sultanpur in Kulu. 90 m. from Dharmsala, and 21 m. S.E. of Kangra, is the famous temple of **Jawala - Mukhi**, picturesquely built up against a rocky cliff, from a cleft in which an inflammable gas issues. This is one of the most popular Hindu shrines in N. India, and the autumn fair is largely attended. The Punjab Government have recently purchased a large estate at Palanpur for the purpose of establishing a health resort; and Bajjnath is likely to be similarly developed. There are charming walks in the pine forests at Palanpur. March and April are the best months for the Kangra Valley.

Sultanpur (D.B.), locally known as Kulu or Kulu shahr ("city of Kulu"), is the principal village in the Kulu Subdivision of the

Kangra District. The Chiefs of Kulu, of whom the Rai of Rupri is the representative, had their residence here before the country was acquired by the Sikhs, from whom the British Government took it over. It is approached either from Simla (p. 332) or from Palanpur. The journey from Simla is a long and tedious expedition, entailing a trying descent from Narkanda on the Simla-Tibet road into the Sutlej Valley, and a stiff climb over the Jalori Pass (10,000 ft.). The marches from Simla to Sultanpur will be found on p. 336.

At Sultanpur is the temple of **Raghunath** (another name for Ram Chandar), which was built by Raja Jagat Singh of Kulu, who was a contemporary of Aurangzeb. On the occasion of the Dasahra festival (see p. lxxv) all the idols of the valley are brought to Sultanpur to do homage to Raghunath.

Nagar, the headquarters of the Subdivisional Officer of Kulu, is 13½ m. N. of Sultanpur.

The route from Palanpur to Sultanpur is shown in table below.

The road from Luhri to Jibhi has been re-aligned, and passes through Ani, a settlement of the Salvation Army, where various industries, agricultural and others, are taught by the resident officers. This road crosses the Jalori Pass at a slightly lower level than

From	To	Accommodation.	Country.	Distance
				Miles.
Palanpur.	Bajjnath.	Good bungalow. Kangra District.	Undulating.	9
Bajjnath.	Dhelu.	In Mandi State. Bad bungalow.	Dreary.	13
Dhelu.	Jhatingri.	In Mandi State. Good bungalow.	Flat and then rapid ascent.	14
Jhatingri.	Badwani.	Small Bungalow.	Cross valley.	13
Badwani.	Karaun.	In Kulu. Small bungalow.	Cross valley and then cross. Bhubu Pass (9480 ft.).	12
Karaun.	Sultanpur	In Kulu.	Steep descent.	8

the present road. The pass is closed by snow for three months in the year.

In winter the Bhubu Pass is closed by snow, and the road to Kulu lies over the Dulchi Pass (7000 ft.). This road leaves the Dhelu-Jhatingri road not far from Jhatingri, and passes through Hurla, Drang, and Kataula, all in Mandi State, and, crossing the Dulchi Pass, drops on to the Simla-Kulu road at Bajaura.

There is good small-game shooting¹ in Kulu in the winter, and the country holds bear (red and black), ibex, *burrhel*, *thar*, and *ghoral*. Leopards are numerous. These and black bear are regarded as vermin, and a reward is given for each one destroyed. To shoot big game, other than vermin, a licence, costing Rs.20, must be procured. The number of licences is strictly limited, as is also the number of head that may be shot by a licence-holder. Licences are issued by the Divisional Forest Officer, Kulu; they cover the whole of Kulu, Saráj, Lahaul, Spiti and Bara Bangáhal. As the population is scattered, there is often some difficulty in getting labour and supplies; travellers and sportsmen should give ample notice of their visit to the Assistant-Commissioner, Kulu, who will send them detailed information regarding supplies, prices, rates of coolie hire, etc. Much trouble is saved by travelling with mules to carry luggage, and on no account should travellers who have entered the country with mules dismiss them there, unless they are making a long stay. The Kulu Valley is famous for its fruit orchards, where the finest apples and pears are grown for export to the plains of India and as far as Aden,

¹ See Colonel Tyacke's *Sportsman's Manual in Kulu, Lahaul, and Spiti*. A booklet of information for travellers, containing the latest rules and hints regarding travelling, has been published, and may be obtained for a small charge from the *Civil and Military Gazette Office, Lahore*.

Ceylon and Burma. An effort is being made to stock the Kulu streams with trout. A hatchery has been established at Nagar. The Kulu trout-rearing has been very successful, and the trout now breed wild in the Biás. Angling-licences are issued by the Assistant-Commissioner, Kulu, for Rs.20 per month, and Rs.50 for the season. Dry-fly fishing is, however, practically impossible during the rains when the river is muddy.

(c) *Delhi to Lahore by Bhatinda and Ferozepore.*

The route taken by the B.B. and C.I. Ry. "Frontier Mail" from Delhi to Lahore travels over the Southern Punjab (broad-gauge) section of the N.W. Ry.

44 m. **Rohtak**; headquarters of the Punjab District of that name since 1824. After the decline of the Mughal power, it was a border town between the Sikh and Maratha powers and fell into the hands of various chieftains. It was plundered in 1857. Now an important trade centre. Muslin turbans interwoven with golden and silver thread are made here.

79 m. from Delhi, **Jind**, junction for a branch, 44 m. to Panipat (p. 327). Although Jind gives its name to the Sikh State of that name, the capital is at Sangrur (see p. 342).

100 m. **Narwana**, junction, 44 m. to Kurukshetra (p. 330).

124 m. **Jakhal**, junction for the broad-gauge line running, 131 m., from Hissar to Ludhiana (p. 342).

187 m. **Bhatinda** junction station. From this place metre-gauge lines run E. to Patiala, Rajpura, and Ambala, W. to Samasata (Bahawalpur), Hyderabad (Sind), and Karachi, and S. to Bikaner and also to Hissar and Rewari (p.

232). There is a very high picturesque fort, seen well from the railway, but the modern town contains nothing of special interest except the shrine of Baba Ratan, a Moslem saint, who is said to have been a Hindu converted to Islam in the reign of Shahab-ud-din Ghori (c. 1200 A.D.), and yet is believed to have lived in the days of the Prophet.

On the line (metre-gauge), 187 m., to Rewari are the following stations :—

47 m. **Sirsa** station (pop. 16,241). The town and fort are supposed to have been founded by one Raja Saras about the middle of the 6th century. It was formerly well known as Sarasvati. The ruins of old Sirsa lie to the S.W. A great cattle fair is held here in August and September, at which 30,000 head of cattle are exposed for sale.

98 m. **Hissar** station (R., D.B.) (pop. 21,415) an important junction of the N.W.R., J.B.R. and B.B.C.I.R. The Hissar branch of the *W. Jumna Canal*, made originally by the Emperor Firoz Shah to irrigate his hunting-seat at this place, terminates here. In 1826 it was restored by the British. In this place also the local levies revolted during the Mutiny of 1857, and murdered the Collector and fourteen Christians, to whom a monument is erected beside the little Church; but before Delhi was taken a body of Sikh levies, aided by contingents from Patiala and Bikaner, under General Van Cortlandt, had restored order.

The city and the fort on the W. side of it were founded in 1354 A.D. by the Emperor Firoz Shah, who made it his favourite hunting-seat. Lying on the main track from Multan to Delhi, it became a place of importance, of which there are only buried remains now besides the old walls and gates. Within

the limits of the original fort are the ruins of a Muhammadan building, the Gujari Mahal, constructed of Jain remains; and in the present citadel enclosure are the Emperor Firoz Shah's Lat Mosque, its adjacent pillar and remains of an old palace.

E. of the city is a finestone building called the *Jahaz*, or Ship, from its shape. It was used as a workshop of the *W. Jumna Canal*, but has now been made over to the Archæological authorities. A large cattle fair is held at Hissar twice a year. S. and W. of the city there is a Government cattle-farm (*Bir*), managed by a European Superintendent, and attached to it is an estate of 39,887 acres for pasturage.

The *District of Hissar* borders on the Rajputana Desert, and in parts is itself little better than a waste, scattered over with low bushes. The water supply is inadequate, the average rainfall being only 10 in., and the country is sadly subject to famines. The *Ghaggar*, with scant verdure along its banks, winds through the N. of the district like a green riband.

113 m. **Hansi** station (D.B.), a modern town of 15,425 inhabitants, on the *W. Jumna Canal*. It is said to have been founded in the 8th century by Anangpal Tomar, King of Delhi, and was long the capital of Hariana. There are ruins of an ancient citadel and some remains of gateways, and a high brick wall, with bastions and loopholes. In 1795 the famous sailor-adventurer, George Thomas, fixed his headquarters at Hansi, which forthwith began to revive. In 1802 British rule was established and a local levy was stationed here, and Colonel Skinner, C.B., settled in 1829. In 1857 the troops of this town mutinied, followed by those of Hissar.

At **Tosham** (D.B.), 23 m. S.W., are some ancient inscriptions.

They are cut in the rock half the way up the hill near a tank much visited by pilgrims who come from great distances to the yearly fair there. Tosham (pop. 2361) is about 9 m. from Bawani Khara Ry. Stn., which is 17 m. from

141 m. **Bhiwani** station (R.H.), pop. 33,270, principally Hindus; formerly a great market for all North Rajputana.

211 m. from Delhi on the main line to Lahore is **Kotkapura** (R.), a town in the Faridkot State in the Punjab, situated 7 m. from Faridkot town. Junction for a metre-gauge line, which runs 50 m. W. from Kotkapura to the terminus at Fazilka. The town has a considerable trade in grain, and a fine market known as the "Bikram" Mandi.

219 m. from Delhi is **Faridkot** town (R.H.), capital of the Sikh State of that name. The Chief is of the same tribe, but of a different Jat family from those of the Phulkian States (p. 340). Chaudhri Kapura founded the Faridkot house in the middle of the 16th century, and his grandson, Sardar Hamir Singh, became independent a century later, having added considerably to the family possessions. Maharaja Ranjit Singh took possession of the State in 1807, but was forced to relinquish it with his other Cis-Sutlej possessions by the British Government. For services rendered during the first Sikh war the Faridkot Chief received the title of Raja and a grant of territory. The State, with an area of 643 sq. m. and a population of 150,661 is under the political control of the Agent to the Governor-General, Punjab States. The State maintains an excellent Company of Sappers and Miners for Imperial Service. The present Chief, H.H. Raja Har Indar Singh Bahadur, was born in 1915 and succeeded in 1918. The

town, which lies 20 m. S. of Ferozepore, contains the residence of the Raja and public offices of the State. It has a considerable trade in grain. The chief places of interest are—a fort built about 700 years ago by Raja Mokulsi, a Rajput, in the time of Bawa Farid, who gave it his name, and the Davies Model Agricultural Farm and farmer's house.

239 m. from Delhi is **Ferozepore** Cantonment station (R., D.B.), lying midway between the Cantonment proper and the City. The City Station is 2 m. farther on. Pop. in Cantonment, 24,656; in municipal area, 29,695. The fort is 1 m. W. of Cant. Stn. The city was founded in the time of Firoz Shah, Emperor of Delhi, 1351-87 A.D. When it lapsed from the Sikhs to the British in 1835 it was in a declining state, but through the exertions of Sir Henry Lawrence and his successors it has increased to its present importance as a market of raw produce, much of which is due to the Sirhind Canal, extended to the District in 1882, and the Grey inundation canals along the Sutlej, inaugurated by Colonel Grey, C.S.I., in the years 1874-8. The main streets are wide and well paved, while a circular road which girdles the wall is lined by the gardens of wealthy residents.

A memorial has been erected at Ferozepore to the Sikh garrison of Saragarhi on the Orakzai Samana range (p. 377), which fell to a man defending the post in 1897.

It was at Ferozepore that the Governor-General, Lord Auckland, met Maharaja Ranjit Singh in December 1838, only six months before his death, to make arrangements for the advance of the British army on Kabul; and it was here also that, just four years later, Lord Ellenborough received the so-called victorious army on its return to British India, General

Sale and the Jalalabad garrison crossing the bridge over the Sutlej at the head of the force.

On the 10th of December 1845 the Sikhs invaded the District, but, after desperate fighting, were driven back across the Sutlej. Since then peace has prevailed, except during the Mutiny of 1857. In May of that year one of the two sepoy regiments stationed at Ferozepore revolted, and, in spite of the presence of a British regiment and some British artillery, partly destroyed the Cantonment.

The *Fort*, which contains the principal arsenal in the Punjab, was rebuilt in 1858 and greatly strengthened in 1887. The ry. passes between the City and the Fort; and the trunk road between the Fort and the Cantonment.

The *Memorial Church*, in honour of those who fell in the Sutlej campaign of 1845-6, was destroyed in the Mutiny, but was subsequently restored. In the cemetery on the Grand Trunk Road to Ludhiana lie many distinguished soldiers, amongst them Major George Broadfoot, C.B., Governor-General's Agent, N.W. Frontier, General Sale, and General Dick.

The three great battlefields of the First Sikh War, fought by Lord Gough, can best be visited from this point. **Mudki** (18th December 1845) lies 17 m. to the S.E.; **Ferozeshah** (21st and 22nd December), 11 m. E., and on the railway to Ludhiana and 8 m. from Mudki; and **Sobraon** (10th February 1846) 22 m. N.E. Mudki and Ferozeshah are easily accessible by motor to within $1\frac{1}{2}$ m. and $\frac{1}{2}$ m. respectively. To reach Sobraon requires a 5 m. ride across country from Mallanwala Khas Stn. on the Jullundur line. It was at the Hariki Ford, near Sobraon, that the Sikh army entered British territories, and in this last battle they lost

10,000 men killed or drowned in attempting to escape across the river. The losses of the British in killed and wounded in these battles,¹ in which they met in the Sikhs foemen worthy of their steel, were terrible—viz., at Mudki, 872 killed and wounded; at Ferozeshah (where the troops failed in the first attack on the entrenchments, which were carried the next day), 2415; and at Sobraon, 2299. Generals Sale and M'Caskill were killed at Mudki, Major Broadfoot at Ferozeshah, and General Dick at Sobraon. The Governor-General, Sir Henry Hardinge, was present at the battles of Mudki and Ferozeshah. A plain obelisk has been erected on each of the battlefields.

Beyond Ferozepore the railway crosses the Sutlej River by a fine bridge, below which are the headworks (opened in October 1927) of the second unit of the Sutlej Valley Irrigation Project, from which the Bikaner Gang Canal (p. 219) flows. The headworks of the first unit are at Suleimanke (p. 400), and other headworks are at Islam (p. 404) and Panjnad, further down the river. The canals under this scheme utilize the surplus water of the Sirhind Canal (p. 341).

255 m. **Kasur**, an old Pathan stronghold. Jn. for a line on the N. to Patti, Tarn Taran, and Amritsar (p. 343). Another line runs to Lodhran (p. 403).

272 m. **Raiwind**; junction for the broad-gauge line S.W. from Lahore to Karachi (Route 19).

297 m. **LAHORE** Junction station * (R. good). Lines run N.W. to Rawal Pindi and Peshawar (Route 17).

¹ See *The Sikhs and the Sikh Wars*, by General Sir H. Gough, V.C., and A. D. Innes; also *Life and Campaigns of Hugh, 1st Viscount Gough, Field-Marshal*, by R. S. Rait.

ROUTE 16.—LAHORE.

LAHORE★ is a municipal city, capital of the Punjab Government, the seat of an Episcopal See, and headquarters of a Division and District of the same name (pop. with Mian Mir, 281,781. Lat. $31^{\circ} 34'$, long. $74^{\circ} 21'$).

If only a few hours can be devoted to Lahore,¹ a selection of the objects of greatest interest may be made from the following route: The Mosque of Wazir Khan, the Fort; and the Badshahi Mosque should be seen in any case. Then drive to the Queen's Jubilee Statue at the cross-roads (Charing Cross), and E. along the Mall, passing (in the order in which they are named), right, the **Masonic Lodge**, a fine edifice at the entrance to the **Lawrence Gardens**; left, **Nedou's Hotel**; right, the combined **Lawrence and Montgomery Halls**; left, **Government House**, the residence of the Governor of the Punjab; left, the **Punjab Club** and **Aitchison or Chiefs' College**; 3 m. farther on is Mian Mir (Lahore Cantonment).

The route along the Mall W. from Charing Cross passes several good shops; left, **Faletti's Hotel Cecil**, **R.C. Cathedral**, **Lord Lawrence's Statue**; right, the **Anglican Cathedral**; left, the **High Court** and the **Accountant-General's Office**; several **Banks**, and then, right, the **Telegraph Office**; and left, the **Post Office**. Near a slight turn in the road, on the left, are the **Market**, the **Central Museum**, the **Jubilee Institute** and the **Mayo School of Art**, and the **Town Hall**, and beyond, the entrance to the **Anarkali Gardens**; the tomb of **Anarkali** and the principal Punjab **Government Offices** lie to the S.W.

¹ Thornton's *Lahore* and Syad Muhammad Latif's *Lahore* (1892) give very full accounts of the place.

of these, the rest of the offices and the Senate Hall of the University being situated opposite to the Museum. Turning N. from the Gardens the **Government College** is passed, right; left, **Deputy-Commissioner's Court and Government School**. Farther E. is the **King Edward Memorial Hospital**. Proceeding round the W. side of the city the **Cemetery** is passed left, and a little farther on the road divides—that left leading to **Shahdara** (p. 367) across the bridge, and that right passing the **Badshahi Mosque**, the **Fort**, and the N. of the city to the railway station.

In the new **Public Buildings** of Lahore an attempt has been made to adopt Hindu and Muhammadan styles of architecture to the requirements of modern buildings. The success of these has been largely due to the late Mr J. L. Kipling, C.I.E., Sir Ganga Ram, C.I.E., M.V.O., the late Sardar Bahadur Bhai Ram Singh, M.V.O., and Mr Basil Sullivan, F.R.I.B.A.

History.—At the end of the 10th century the kingdom of Lahore was in the hands of a line of Brahman Kings of Kabul, from whom it was wrested by Mahmud of Ghazni, whose famous slave, Malik Ayaz, was Governor here. It did not, however, attain to magnificence till the rule of the Mughals. Akbar held his court here between 1578 and 1598: he enlarged and repaired the fort and surrounded the town with a wall (which has been demolished). Jahangir often resided at Lahore, and during his reign Arjan Dev, Guru of the Sikhs, compiler of the *Adi Granth*, died in prison here. The mausoleum of Jahangir is at Shahdara, 4 m. from Lahore (see p. 367). Shah Jahan built the palace of Lahore, and Aurangzeb built the great mosque, but in his time the city began to decline, and was much ruined by the invasions

of Ahmad Shah Durani. Of its glory in its prime the proverb ran : "Isfahan and Shiraz united would not equal the half of Lahore." For half a century after the Mughal capital was utterly effete, vigorous Muhammadan governors, Abdul Samand Khan, Zakaria Khan (1717-38), Yahia Khan (1738-48), the son of the latter, and nephew of the Delhi Wazir Kamar-ud-din Khan, and Mir Mannu, son of the last (1748-52), maintained themselves in the Punjab, and fought with the Sikhs, and submitted to the Persians under Nadir Shah, and the Afghans under Ahmad Shah. When the widow of Mir Mannu, Murad Begam, was treacherously entrapped by the Wazir Ghazi-ud-din, Adina Beg (1755-8) was made Governor of the Province; and it was his summoning the Mahrattas to protect him against the Sikhs that ultimately led in 1761 to the Battle of Panipat, in which Ahmad Shah utterly crushed the Hindu forayers of the South for the moment. From 1775 onwards the Sikhs were the real rulers of Lahore.

Under Ranjit Singh, Lahore regained some of its former splendour, and since the period of the British rule, which commenced in 1849, buildings have greatly multiplied. The Circular road runs round the city, to which it gives access by thirteen gates.

Within the ramparts that surround the city, in the N.W. corner, is the citadel, usually called the fort. The moat has been filled in and has been converted into fine lawns, which encircle the city on every side except the N.W. The Ravi River, flowing W., once washed the walls of the city, and in 1662 made such encroachments as to necessitate the construction of a massive embankment 4 m. long. It now sweeps round Lahore and passes to the S. at about 1 m. W. of the city.

The **Lawrence Gardens**, which cover 157 acres, contain a large variety of trees and shrubs of different species. The visitor will remark the *Pinus longifolia*, the Australian gum-tree, and the carob-tree of Syria. There is also a menagerie at the W. end, and a cricket ground at the E. end.

At the N. side fronting the **Mall**, is the **Lawrence Hall**, built in memory of Sir John Lawrence in 1862. The **Montgomery Hall**, built in 1866, in memory of Sir R. Montgomery, faces the central avenue of the gardens. A covered corridor connects them. The Montgomery Hall contains portraits of Sir Henry Lawrence, Sir John Lawrence, and other Lieutenant-Governors of the Province, and celebrated Englishmen, including Brigadier-General John Nicholson.

Government House stands on the opposite side of the Mall, N. of the Lawrence Gardens. It was the tomb of Muhammad Kasim Khan, cousin of the Emperor Akbar. He was a great patron of wrestlers, and his tomb used to be called *Kushtiwala Gumbaz*, or Wrestler's Dome. The present Governor is Sir Geoffrey de Montmorency, K.C.S.I., K.C.I.E., K.C.V.O., who was appointed in August 1928, upon the transfer of Sir Malcolm Hailey to the United Provinces.

E. of this is the **Punjab Club**, and E. again the **Aitchison Chiefs' College**, which owes its inception to Sir C. U. Aitchison (Lieutenant-Governor, 1882-7), and of which the foundation-stone was laid by Lord Dufferin in 1888. It is intended for the education of the sons of the Princes and leading Chiefs of the Punjab. The Central Building is a very fine one, and the number of students varies from 80 to 100.

The **Jubilee Statue of Queen Victoria** in the centre of the Mall, at

the spot known as Charing Cross, is a pleasing one. The R.C. Cathedral is a very fine building; the Anglican Cathedral is a large red-brick Gothic church, erected in 1884-7. Beyond is a statue of Lord Lawrence, Chief Commissioner and Lieutenant-Governor of the Punjab, 1853-9. It was Robert Cust, Deputy-Commissioner of the Kangra Valley, and not John Lawrence, who in 1848 was the author of the pen and sword phrase, which the sculptor Sir J. E. Boehm inscribed on the base of the statue, and which has now been modified in deference to Indian susceptibility. The High Court is built in the late Pathan style of the 14th century. The Telegraph Office, the Post Office, and the Imperial Bank are all handsome buildings. Adjoining the last is the American Presbyterian College.

The Central Museum is perhaps the most effective of all the public buildings in Lahore; the foundation-stone was laid by H.R.H. the Duke of Clarence in 1890. It contains an excellent collection of antique sculptures, coins, Kangra and Mughal paintings, the various arts and crafts of the Province, and a unique collection of textile manufactures and some of the raw products of the Punjab. An effort has been made by the Curators at different times to show the processes of manufacture of the various crafts in the same cases as the finished articles. The glory of the Lahore Museum is the collection of Græco-Buddhist sculptures which were excavated from various sites in the Pesháwar district and surrounding territories, the ancient Gandhára country. These sculptures are remarkable in that they were largely the work of Græco-Bactrian sculptors, and, consequently, show a very strong Greek, or rather Hellenistic influence, which is especially noticeable in the well-balanced grouping of

the figures and the treatment of the drapery.¹ The subjects, however, except for some decorative details, *are purely Indian, the bas-reliefs illustrating scenes of Buddha's life. It is not a little curious that the Buddha image itself is, in all probability, a creation of the Græco-Bactrian artists of Gandhára. The flourishing period of the Græco-Buddhist school is believed by the best authorities to fall in the 1st century A.D., though the most classical specimens are probably earlier. The visitor should note particularly the *stūpa* drum of Sikri, which occupies the centre of the archæological gallery. It is carved all round with various scenes of Buddha's life, including that of his being fed by a monkey. The Sikri sculptures were excavated by the late Sir Harold Deane, the first Chief Commissioner of the Frontier Province. They include the statue of Gautama Buddha emaciated after his long fast, which is striking through its almost repulsive realism. Among inscriptions may be seen that of Takht-i-Bahai, dated in the reign of King Gondophares, at whose court St Thomas, the Apostle of India, is believed to have lived, and who, according to tradition, put the Apostle to death.

In the archæological department² there may be seen, also, the bases of two pillars brought by General Cunningham from Shah ki Dheri, probably the ancient Taxila; numerous Buddhist sculptures from the Yusufzai country and elsewhere, in which the classical influence is plainly

¹ The standard work on these sculptures is A. Foucher's *Art gréco-bouddhique du Gandhára*, vol. 1, Paris, 1905.

² See *Descriptive Guide to the Department of Archaeology and Antiquities, Lahore Museum*, by Percy Brown. Illustrated. Lahore, 1908. 8 as. An illustrated catalogue of the Græco-Buddhist (or Gandhára) sculptures by Mr H. Hargreaves is on sale for 8 annas.

discerned; a Buddhist pillar about 9 ft. high, with a huge head projecting on one side, dug up near Jhelum; also two old brass cannon found buried in a mound of Anandpur, in the District of Hoshiarpur, thought to be of the time of Guru Govind Singh. There are also two relics of the prehistoric age—two finely-finished celts of porphyritic greenstone, found in Swat.

The collection of jewellery, both antique and modern, including specimens from the Trans-Indus territory, is very good, and shows a power of design and decoration well worth studying; and the collection of hookahs of all periods and in all materials is contained in another interesting case. There is also a comprehensive collection of musical instruments made by the late Mr Lockwood Kipling, which show great beauty of design and execution, and a good collection of Indian arms and armour, among which a dagger fancifully decorated with pearls running in grooves in the blade, and a sword, the hilt and scabbard of which are decorated with Niello work, are particularly noticeable. Other cases contain specimens of pottery and Punjab glass, and of the *Koftigari* work of Gujarat and Sialkot; cups and ornaments of vitreous enamel from Bahawalpur; silver inlaid in pewter and perforated metal work from Delhi.

There are good specimens of the silk manufactures of Bahawalpur and Multan, and the satinettes are excellent. The embroideries called *shishadar phulkaris*, of soft floss silk on cotton, interspersed among which are small bits of glass, are special to the Punjab; the rude idols, hideously painted, were worshipped by the ladies of the Sikh Court. There are choice examples of Kashmir shawls, both woven and hand-embroidered, and some in which the two processes are combined, and various specimens of that interesting process

called "tie-dyeing," which gives curious patterns, and shows the method of manufacture. There have recently been added miniature model groups showing the workers engaged in making pottery, glass, metal ware, lacquer work, turning, etc., which are excellently grouped and painted. There are also collections of the leatherware of the Punjab; of ethnographical heads by Messrs Schlagentweit; lay figures habited in the costumes of the people of Lahaul, Spiti, and Ladakh; and Tibetan curiosities, such as prayer-wheels.

In the mineral section will be seen the model of the *Koh-i-Nur* made for the Exhibition of 1851. According to the Hindus, this diamond belonged to Karna, King of Anga, and according to the Persians, it and its sister diamond, the *Darya-i-Nur*, or "Sea of Light," were worn by Afrasiab.

The numismatic section, which is almost unique, for the period of Greek rule in Bactria and the Punjab, and contains also Mughal and Indian coins of great interest, can be seen on application to the Curator. The coin catalogue is by Mr R. B. Whitehead, I.C.S., Clarendon Press, 1914. Attention is also drawn to the specimens of jewellery from the Trans-Indus country, reproduced by Sir J. H. Marshall in his Report for 1902-3 (pp. 185-94).

The Tibetan collection includes some remarkable specimens of Lamaistic temple banners. Finest among them is the embroidered banner, showing Padma-sambhava (Lotus-born), who converted Tibet to Buddhism. One of the painted banners depicts the "Wheel of Existence" and other scenes of Buddha's life from his conception and birth till his Nirvana and the worship of his relics.

Among minor antiquities should be noted a Buddha statuette of

brass inlaid with silver and copper from Fatehpur, in the Kangra District. It belongs to the 6th century A.D. (see *Archæol. Survey, Ann. Rep.*, 1904-5, pp. 107-9).

Among the specimens of the mineral resources of the country will be seen iron ore from Bajaur. It is a magnetic oxide of singular purity. Antimony and lead are also shown, and gold found in the sands of the Punjab rivers in small quantities. Specimens of rock-salt of two kinds—one from the hills between the Jhelum and the Indus, and the other from the hills beyond the Indus—are exhibited too.

Opposite the Museum is the University Hall and University Laboratory, and in front of the latter is the famous "Kim's" gun, called the Zamzama, "Hummer," or Lion's Roar. The Sikhs called it the Bhangianwali Top—that is, the cannon of the Bhangi confederacy. The gun was made by Shah Wali Khan, Wazir of Ahmad Shah Durani, and was used by him at the Battle of Panipat. After Ahmad Shah left India it came into the hands of the Bhangi Misl, and Maharaja Ranjit Singh eventually got possession of it, and used it at the siege of Multan in 1818. It was then placed at the Delhi Gate of Lahore until 1860, when it was removed to its present site. The Persian inscriptions on it give the date of casting, 1762 A.D.

The Mayo School of Arts attained considerable eminence under the late Mr J. Lockwood Kipling, C.I.E., Mr Percy Brown, and the late Sardar Bahadur Ram Singh, M.V.O. The School of Arts has always been a centre of craftwork in the Punjab, and the work of its staff and students has been extensively utilised by Government in decorative work of all kinds all over the Province. It has been fortunate to have as Principals men sympathetic with

the indigenous arts of the Province, and the chief aim of this institution is still to encourage and improve these arts. The present Principal, Mr Lionel Heath, has expanded the school; and by direct dealing with the small craftsmen, has helped to preserve the traditional character of Punjab arts and crafts.

W. of the new Museum is the **Town Hall**, opened by H.R.H. the late Duke of Clarence in 1890, and S. of this is the **Punjab Public Library**, said by some to have been built by Wazir Khan, by others by Ilahi Bakhsh. It is a handsome building, with four white cupolas, and contains many valuable books.

Not far off, on the E. outskirts of the Anar Kali Bazar, is the Nila Gumbaz, or Blue Dome, the tomb of Abdul Razak, a saint of the time of Humayun. Farther S., near the Presbyterian church, is the shrine of another Muhammadan saint called **Mauj-i-Darya**. Over the door is a Persian inscription which says it is the tomb of Saiyad Muhammad Shah Mauj-i-Darya, son of Nuru'llah, who was a spiritual guide in the time of Akbar.

The **Tomb of Anar Kali**, Pomegranate Blossom (a name given to a favourite lady in the harem of Akbar, who was also called Nadira Begam, or Sharfunnissa), is an octagon cased in plaster and surmounted by a dome. It was once occupied by the heir-apparent of Ranjit Singh: later it was given to General Reuben Ventura, an Italian officer of Jewish extraction in the Sikh army, who removed later on to the adjoining house, now the Secretariat, and used the tomb as his zenana. After the annexation of the Punjab the tomb was converted into the church of the Civil Station (St James), and it is now used as the Historical Record Room. This is a model of its kind and should be visited (apply to the Keeper of the

Records). Many interesting documents are on view. The cenotaph, now placed at the E. end of the central chamber, is of the purest white marble, and the ninety-nine names of God carved on it are so exquisitely formed as to surpass anything of the kind in India. On the side, below the names of the Deity, is written *Majnun Salim-i-Akbar* (the enamoured Salim, son of Akbar), Salim being the name of Jahangir. On the W. side is a date, above the words "In Lahore," corresponding to 1615, which is probably the date of the building of the tomb. The story is that Anar Kali was beloved by Salim, and was seen by Akbar, his father, to smile when the Prince entered the harem. As a punishment for this it is said that she was buried alive, and the pathetic distich engraved on her sarcophagus certainly indicates that Salim was her lover :—

"Ah gar man baz binam rue yar-i-khwesh ra.
Ta kiamat shukar goyam Kardagari,
khwesh ra."

"Ah, if I could again see the face of my beloved,
To the day of judgment I would give thanks to my Creator."

In front of the Civil Secretariat Office, adjoining the tomb, is a cross to the memory of Sir Donald M'Leod, Lieutenant-Governor, 1865-70.

The Government College buildings (700 students) rise finely on the right side of the road from Anarkali to the city. On the opposite side of the road are the District Courts, which possess more architectural merits than buildings of this class usually do in India. Farther back to the W. from here is the noted shrine of **Data Ganj Bakhsh**, a saint of the time of Mahmud of Ghazni. Passing round the W. side of the city a fine view is obtained at the N.W. corner of the great mosque and

the Sikh sacred places to the N. of it and the fort rising above it. The first of the shrines is that of **Guru Arjan**, the fifth Guru, and compiler of the *Adi* (original) *Granth*. The *Granth* is read here daily in a huge volume over which attendants reverently wave *chauris*. According to Sikh legend, he disappeared in the Ravi on this spot, upon which Maharaja Ranjit Singh, accordingly, built this memorial. Between this and the Hazuribagh is the **Samadh**, covering the ashes of Maharajas Ranjit Singh, Kharak Singh, and Nau Nihal Singh, a glittering white building rather out of keeping with the solemn mosque. It faces the W. wall of the fort, and is a square stucco building, restored in part in 1840, on a high platform of marble. The ceilings are decorated with traceries in stucco inlaid with mirrors. The arches of the interior are of marble, strengthened with brick and *chunam*, and clamped with iron, by order of Sir D. M'Leod, when Lieutenant-Governor. In the centre is a raised platform of marble, on which is a lotus flower carved in marble, surrounded by eleven smaller flowers. The central flower covers the ashes of the great Maharaja; the others those of four wives and seven concubines who became *satis* with his corpse.

In the centre of the **Hazuribagh** is the **Baradari**, a marble pavilion built by Ranjit Singh from the spoils of Mughal edifices. The patched nature of the structure will be evident from the use of various fragments of inlaid pavements, and from the balustrade round the roof, which is partly made up of halves of pierced window-screens. The tradition that the whole pavilion once formed the superstructure of the mausoleum of Jahangir can easily be proved to be without any foundation. The total aspect of the

Baradari is not unpleasing, notwithstanding its mixed style, and its historical associations render it of special interest. It is frequently mentioned by European travellers who visited Lahore during the Sikh period. William Moorcroft, the explorer, was lodged here in May 1820, in the reign of Ranjit Singh, and Captain Leopold von Orlich was received in audience by Sher Singh in January 1843.

Right opposite the flight of stairs leading up to the *Badshahi Masjid* is one of the two main gates of the Lahore Fort,¹ called the *Hazuribagh Darwaza*. It is sometimes designated by the name of *Akbari Darwaza*, the Gate of Akbar, but the present gate cannot possibly have any connection with that Emperor. It is a late structure, apparently built at the same time as the *Badshahi Masjid*, and renewed by the Sikhs.

The *Hazuribagh Darwaza* and the *Masti Darwaza* (the other main gate which gave access to the fort from the side of the city) have been closed since the British occupation.² The fort is now entered through a modern postern dating from the year 1853, where a register of visitors is kept. Behind it rises the *Hathi Pol*, or Elephant Gate, which once formed the private entrance to the apartments occupied by the Emperor and his ladies. The gate itself, as well as the adjoining curtain wall, is gorgeously decorated with tile mosaics, which are continued all along the W. and N. faces of the fort wall.³ Though this tile-work has suffered irreparable damage owing to neglect and the repeated bombardments during

the Sikh period, it still retains its brilliancy of colour, and fully deserves a close inspection. This so-called *kashi* work was a favourite mode of decorating brick buildings in the days of Shah Jahan, and is by no means uncommon in the buildings of his reign found at Lahore. But the decoration of the fort wall is unique in that in several of the panels figures of living beings have been introduced. Many panels depict elephant fights, the favourite recreation of the Mughal Court. The elephants are always full of vigour, but the same cannot be said of the camels and horses. The spandrels are decorated with winged figures of Persian fairies (*pari*) in floating robes, carrying a fan or a lamb or holding a horned demon with hands tied in front. The decoration on the wall of the *Saman Burj* is particularly fine, and special attention may be drawn to the two panels depicting a camel fight, and one, unfortunately much damaged, showing four Mughal horsemen playing polo. The goals, consisting of two upright slabs, are clearly shown on both sides of the panel. It should be remembered that polo, or *chaugan*, as it is called in Persian, was a favourite sport at the Court of the Great Mughals. On the N. wall most of the decoration has gone, but beneath the *Khwab-gah* of Jahangir may be seen a pair of particularly fine blue dragons (the dragon, or *azhdaha*, was one of the emblems carried in front of the Emperor), whilst another panel shows the familiar scene of the goat and monkey-man.

The enamelled tile-work on the N. wall belongs, perhaps, to the reign of Jahangir, but that on the *Saman Burj* and on the W. wall may be safely ascribed to the beginning of Shah Jahan's reign.¹ A Persian inscription over the *Hathi Pol* records that Shah Jahan built a

¹ The account of the Lahore Fort is based on Dr Vogel's *Historical Notes on the Lahore Fort* (*Journal Punjab Historical Society*, 1911, 1, 38-55).

² The old elephant route into the fort is also closed. It originally gave access directly to the *Shish Mahal* Court.

³ On these tile mosaics, see *Journal of Indian Art and Industry*, vol. 14, Nos. 113-17.

¹ See the *Mosaics of the Lahore Fort* by Dr J. Vogel.

Royal Tower (*Shah Burj*) in A.D. 1631-2. The *Shah Burj* in question is the same which is now known as *Saman Burj*.

Three distinct building periods are noticeable in the palace proper—the early Mughal palace, completed by Jahangir in 1617-18; Shah Jahan's palace, completed in 1631-2; and the tasteless and insignificant additions due to the Sikhs, who restored the palace after a period of neglect. The military occupation since 1849 has done great harm, which of late years has been partly remedied, mainly through the influence of Lord Curzon.

From the *Hathi Pol* two roads lead up to the palace buildings. The ancient road, now closed to the public, starts to the N. (left) of the gate, and by a twisted flight of steps leads up to a courtyard which, by a marble gate, communicates with another court adjoining the square of the *Saman Burj*. It was once the private entrance to the imperial palace. The modern road is a ramp of military construction which takes the visitor to the W. end of what was one the quadrangle of the *Diwan-i-'Am*. The cloistered row of buildings forming this square were demolished after the military occupation, except a block in front of the Pearl Mosque, or *Moti Masjid*. This will convey some idea of what the original cloister must have been like. Over the gate there is a marble slab with a Persian inscription which records the completion of the early Mughal palace by Ma'mur Khan in the twelfth regnal year of Jahangir—1027 of the Hijra (A.D. 1617-18).

This gate and the little courtyard behind give access to the Pearl Mosque, or *Moti Masjid*, apparently the earliest of the four buildings of the name.¹ It is an

exquisite little edifice of white marble, with a court in front. The Sikhs converted it into a treasury, and it was continued to be used as such until it was rescued by Lord Curzon, who ordered its restoration; this was carried out in 1903-4. The variety of ceiling construction in the various compartments of the prayer chamber should be noticed.

The *Diwan-i-'Am* itself occupies the centre of the fort. Until 1903 it was used as a barrack, and it still bears traces of military occupation, though all modern excrescences have since been removed. It consists of two distinct buildings. The smaller of the two at the back (N. side), which consists of rows of small apartments, is the older portion which existed in the reign of Jahangir. The open hall in front, supported on four rows of ten sandstone pillars, was added by Shah Jahan in the first year of his reign, so that his courtiers, when attending the daily public audience, might be sheltered against sunshine and rain. Though one of the first creations of Shah Jahan's reign, it is decidedly disappointing from an architectural point of view. The entire superstructure is modern, and most of the buildings appear to have been reconstructed, perhaps during the Sikh period. The most interesting part is the throne balcony, or *jharokha*, in which the Emperor used to make his daily appearance. Between the front row of columns may be observed remnants of the white marble railing, whilst along the platform in front of the hall the red sandstone railing is partly preserved. These railings served the purpose of grouping the nobles, when attending court, according to their rank and dignity.

The historical associations of the *Diwan-i-'Am* are many. It was probably here that Manucci rejoined Dara Shikoh after the

¹ The Pearl Mosque in the Agra Fort was built by Shah Jahan, that in the Delhi Fort by Aurangzeb, and that at Mahrauli, or Old Delhi (Kutb), by Bahadur Shah I.

Battle of Samugarh.¹ Manucci has an extraordinary story about some golden pigs which were made by order of Jahangir to annoy the Mullahs, for, when he awoke, he would rather see these pigs than the face of a Muhammadan. After his death Shah Jahan had them buried "in front of the royal seat in the fortress of Lahore." The whole story sounds rather like a yarn. In the days of Ranjit Singh the *Diwan-i-'Am* was known as *Takht*—i.e., the Throne. It was here that after Ranjit Singh's death his body lay in state. Dr Martin Honigberger, his court physician, gives a most graphic description of how he met in the great courtyard one of the four Queens who were to be burnt with the remains of their royal husband.²

At the back (N.) of the *Diwan-i-'Am* is the oldest portion of the Lahore palace. It is usually designated as the Quadrangle of Jahangir, although it is not impossible that these edifices go even back to the reign of Akbar. They consist of two rows of buildings facing each other, with sandstone porches characterised as early Mughal by eaves supported on ancient brackets. The carved work on the two slightly-projecting edifices at the ends of both rows is particularly fine. The centre of the N. side of the quadrangle is occupied by the *Bari Khwabgah*, which is ascribed to Jahangir, but is evidently modernised to a large extent. It has been proposed to convert this building into an armoury, and display in it the collection of ancient weapons now kept in one of the buildings of the *Saman Burj*. The central portion of the quadrangle was once occupied by a square tank and ornamental garden, but since 1849 these have

made place for some ugly cook-houses and other structures. At present most of the buildings of Jahangir's Quadrangle are utilised for Government purposes.

The smaller square adjoining Jahangir's Quadrangle on the W. has preserved more of its original character. It is occupied by a formal garden, with a platform and fountain in the centre. The open pavilion on the N. side of this garden is the *Chhoti Khwabgah*, or Lesser Bedchamber, which may be safely ascribed to Shah Jahan. It is an elegant pavilion of white marble supported on five rows of five pillars carrying scalloped arches. The archways on the N. are closed with pierced screens. An eave, supported on brackets, runs along the four sides of the building. The roof has a parapet with marble facing decorated with a graceful border of *pietra dura*. The interior is paved with variegated marbles, and the centre is occupied by a fountain basin scalloped out and inlaid with semi-precious stones. Most of the inlay, however, has disappeared. For more than forty years the *Chhoti Khwabgah* was used as a garrison Church. It was restored at the instance of Lord Curzon. The marble ceiling is modern.

By looking down from the *Khwabgah*, a ruined structure will be seen at the foot of the fort wall. It is the *'Arzghah*—i.e., the place where in the morning the nobles assembled to pay their respects to the Emperor.

The next court, called *Khilat Khana*, offers nothing remarkable. In the N.W. corner of the adjoining square there is an open pavilion which dates from the reign of Ranjit Singh, and was used by him as a *Kachahri*, or Court of Justice. Its general appearance is not ungraceful, but its Sikh origin is clearly indicated by the combination of white marble and red sandstone brackets, and the

¹ Nicolao Manucci, *Storia do Mogor*, translated by William Irvine (Murray, 1907) vol. 1, pp. 158, 309.

² Honigberger, *Früchte aus dem Morgenlande*, p. 111 (English translation, p. 97).

juxtaposition of marble trellis screens with red sandstone posts in the ornamental railing which is placed on the roof of the building. The curious frescoes on the N. wall, relating to the legend of Krishna, are evidently the work of one of Ranjit Singh's court painters.

The last court to be seen is that which occupies the N.W. corner of the palace, and is known by the name of *Saman Burj*¹ (p. 362). This appellation, however, dates only from the Sikh period; the original name was *Shah Burj*, or Royal Tower. The inscription over the *Hathi Pol*, which records the completion of the *Shah Burj* in the 4th year of Shah Jahan's reign (A.D. 1631-32), refers to this group of buildings.

First of all will be noticed the large hall, now known as *Shish Mahal*, or Palace of Mirrors, which occupies the N. side of the square. It was here that in March 1849 the sovereignty of the Punjab was assumed by the British Government, as is recorded on a marble tablet let into the wall. The *Shish Mahal* is built on a semi-octagonal plan. Its largest side, facing the square, has a row of double pillars of inlaid white marble, forming five archways surmounted by an eave of the same material. Within, the spandrels over the arches are decorated with *pietra dura*, which has marvellously escaped the vandals who have mutilated this kind of work wherever it was found. The graceful vine pattern over the two outer arches deserves special notice. The main room, a rectangular hall of noble dimensions, has a dado of white marble, while the upper portion of the walls and the ceiling are decorated with mosaic of glass laid in gypsum, which accounts for the

name of Palace of Mirrors. This decoration belongs to two different epochs. The ceiling, with its prevailing aspect of subdued gilt, formed undoubtedly part of the original edifice. It is rich without being gaudy. The wall decoration, on the contrary, is decidedly vulgar, and the introduction of sherds of blue and white china bears testimony to a childish taste. It is typical Sikh work. The central hall is surrounded by a row of nine smaller rooms decorated in the same fashion. In the largest of these rooms, at the back of the main hall, is a very fine marble screen of trellis-work. The roof of the *Shish Mahal* is encumbered with a curious medley of structures dating from the Sikh period.

The ornamental marble pavilion, with "Bengali" roof, which stands on the W. side of the square, is called *Naulakha*—a name which is explained from its having cost nine lakhs of rupees to build. Probably the name and the supposed tradition are comparatively modern. The building has been wrongly ascribed to Aurangzeb's reign; it undoubtedly belongs to the beginning of Shah Jahan's reign, like the other buildings of the *Saman* (or *Shah*) *Burj*. The *pietra dura* decoration of the marble dado is entirely in the style of his reign, but the inlay in the panels above the dado is of a very different type, and recalls some of the work found on the Golden Temple at Amritsar. The Sikhs have meddled with the original decoration, as in one of the dado panels there appears a "Chinese" cloud converted into a bird. The painting and mirror work of the wooden ceiling is also certainly due to the Sikhs. The roof must once have been covered with sheet copper and pinnacles of the same metal. It is unknown when it was removed.

The remaining buildings of the *Shah Burj* do not offer anything

¹ The word *saman* is an abbreviation of Arabic *musamman*, meaning "octagonal." The usual rendering of *Saman Burj* by "Jasmine Tower" is wrong.

remarkable. Those on the S. side of the square are now used as an armoury, but it is intended to transfer the collection of ancient weapons to the *Bari Khwabgah*. The courtyard is paved with grey and variegated marble, and the centre is occupied by a reservoir. In the N.W. corner of the court there is a stone floor, measuring 9 ft. 6 in. square, which does not belong to the original pavement. The tradition that it was taken by the Sikhs from the platform in front of the gateway of the Badshahi Masjid is untrue. It belonged originally to a mansion in the city, and was purchased by Ranjit Singh. An apartment in the N.E. corner of the square is indicated as Sher Singh's bath-room. It belongs to the original palace, but was altered by the Sikhs to suit the requirements of a Hammam.

Leaving the Hazuribagh by the S. gate, and turning E. past the reservoir of the Water-works, the *Sonehri Masjid*, or Golden Mosque, is reached. This has three gilt domes, and was built in 1753 A.D. by Bikhari Khan, a favourite of the widow of Mir Mannu, a lady who governed Lahore a short time after her husband's death. He is said to have displeased the lady, whose female attendants beat him to death with their shoes. The situation of this mosque at the junction of two streets is picturesque.

In a courtyard behind the mosque is a large well, with steps descending to the water. It is said to have been dug by Arjan, the fifth Guru.

A street with some fine balconies leads E. again from here to a *chawk*, or square, where is the very beautiful Mosque of *Wazir Khan*. It was built in 1634 by Hakim 'Ala-ud-din of Chiniot, Governor of the Punjab under Shah Jahan. The brick walls are covered with in-

laid work called *Nakkashi*, a kind of mosaic of glazed tiles, renewed where necessary. The colours of the tiles are burnt in, the individual tile patterns being in hard mortar. The yellow ground of the tile-work is extremely effective and beautiful. Over the noble entrance is written in Persian: "Remove thy heart from the gardens of the world, and know that this building is the true abode of man." It was completed in 1634 A.D. In the centre front of the mosque is the Moslem creed, and in panels along the façade are beautifully written verses from the Koran. The structure and its decoration are notably Persian in character. From the gallery round the minarets, about 3 ft. broad, there is a very fine view over the city, which is truly Oriental and picturesque. Beyond the *chawk* is the Delhi Gate of the city, from which the Landa Bazar now leads to the railway station. The palace of Dara Shikoh and the great Tripulia Bazar lay between the city and the station; and the houses and gardens and tombs of the nobles extended along the Ravi as far E. as Shalimar. The ruined tomb of Mir Mannu adjoins the open space W. of the railway station; the mosque of Dai Anga, E. of the station (once used as a railway office, but restored at the instance of Lord Curzon), was built by a foster-mother of Shah Jahan in 1635.

The picturesqueness of the old town must appeal to every one, but to artists it will be found of especial interest. The balconies and projecting oriel windows of the irregular brick houses, together with the variety and colour of the costumes of the people, form a striking picture. The most effective corners will be found at the N. ends of the streets leading from the Mori and Lohari Gates. In front of the latter the Anar Kali Bazar runs for $\frac{1}{2}$ m. down to the Punjab

Museum. To the E. of it lie the King Edward Memorial, with the Albert Victor Memorial wing, the Lady Aitchison Female Hospital, and the Lady Lyall Nurses' Home. A college for girls has been started in memory of the visit of Queen Mary.

Near the S.W. corner of the Civil Station is the Chauburji (Four Towers) gateway. This beautiful but ruined building, which led to the garden of Zebunnissa Begam, a daughter of the Emperor Aurangzeb, is faced with blue and green encaustic tiles. This lady, who died in 1669 A.D., long before her father, and who was a poetess under the name of Makhfi (Hidden), is said to have been buried at Nawar Kot, 1 m. S. from this garden.

Excursions from Lahore.

(1) The **Shalimar Gardens** are 5 m. E. from the railway station. About half-way to them is the gateway to the **Gulabi Bagh**, or Rose Garden, laid out in 1655 by Sultan Beg, Admiral of the Fleet to Shah Jahan. The Nakkashi work of coloured tiles on the gate is very beautiful, and hardly inferior to that on Wazir Khan's Mosque. On the gateway is inscribed in Persian :—

'Sweet is this garden; through envy of it,
the tulip is spotted,
The rose of the sun and moon forms its
beautiful lamp.'

Close to this is the tomb of Sharfunnissa Begam, sister of Zakaria Khan, which is decorated with representations of cypress-trees in enamelled plaster.

There are many dargas and gardens near this building, to which on holidays crowds of people go on pilgrimage. Between them and the river is the village of Begampur. The ruined octagonal tomb to the E., known as the Bagga Gumbaz, or White Dome, is the tomb of Yahia Khan, and

not far off are the mosque and grave of Zakaria Khan and his father, in a garden of the former, whose palace was at this place. Nearer the river again is the garden tomb of Shah Bilawal, a saint honoured by Shah Jahan, where Maharaja Sher Singh was murdered in 1843.

Opposite to the Gulabi Bagh, and within a railway enclosure to the S. of the road, is the **Tomb of 'Ali Mardan Khan**, the celebrated engineer, who created the Shalimar Gardens. Its lofty archway retains traces of exquisitely coloured tiles. 50 yds. S. of this is the octagonal tomb, built of brick, now much ruined.

The **Shalimar Gardens** were laid out in 1637 A.D. by order of Shah Jahan. They are divided into three parts, in tiers of different levels; the highest was known as the Farhat Bakhsh, and the two lowest as Faiz Bakhsh. The whole extent is about 80 acres, surrounded by a wall, with a large gateway and pavilions at each corner. The present plastered pavilions are not the original ones, which were of white marble. Canals traverse the garden, and there is a tank in the centre with an island and a passage across to it. There are one hundred small fountains in the first garden, and double that number in the tank. The trees are chiefly mangoes.

On the opposite side of the road are two other gardens, the **Sindhana-wala** and **Misr Brij Lal's**; to the E. is the fine garden of **Jamadar Khushhal Singh**, and across the road to the N.E. that of **Lehna Singh**.

(2) 4 m. from Lahore on the line to Raiwind (Route 19, p. 400) is **Lahore Cantonment** stn. The Cantonment lies 5 m. to the S.E. of Lahore Civil Station. It was, in

former years, unhealthy, and the dust and heat in summer contributed to its unpopularity. It is now quite healthy, and the rose-bushes along the roads lend a special charm to the place.

About $\frac{3}{4}$ m. to the N.W., on the right of the road from the railway station to the Cantonment, is the *Shrine of Mian Mir*, a saint from whom the Cantonment derived its former name, and who was honoured by the Emperors Jahangir and Shah Jahan, his real name being Muhammad Mir. It stands in the centre of a quadrangle 200 ft. sq., on a marble platform. Over the entrance are an inscription in Persian and the date=1635 A.D. The left side of the enclosure is occupied by a mosque.

Three sepoy regiments, the 16th Grenadiers and the 26th and 48th Bengal Infantry, and the 8th Bengal Light Cavalry were stationed at Mian Mir in 1857. They outnumbered the British troops by four to one; and their disarmament on 13th May by Brigadier-General Corbett, was perhaps the most important of all the steps taken at the commencement of the Mutiny to secure the Punjab and ensure the taking of Delhi. It was carried out quietly and effectively by H.M. 81st Regiment and two troops of artillery, in the presence of the Judicial Commissioner, Mr Robert Montgomery, Sir John Lawrence being at the time in Rawalpindi. The 81st also occupied the Fort of Lahore and the Govindgarh Fort at Amritsar.

Returning towards the city, the traveller will pass on the right the village of *Shahu-ki-Ghari*, where are a number of large tombs, some with cupolas, but all more or less ruined. Some way W. of the village is Kila Gujar Singh, so called from one of the Bhangi Sardars, and near it, and upon the main road from the Civil Station to the

railway station, is the most venerated tomb in Lahore or its vicinity. It is called the *Tomb of Bibi Pakdaman* (the chaste lady). According to tradition, this saint was the daughter of the younger brother of 'Ali by a different mother. Her real name was Rakiya Khanum, and she was the eldest of six sisters, who are all buried here, and who fled with her from Bagdad after the massacre at Karbala; she died in 728 A.D., at the age of ninety. Visitors are expected to take off their shoes. There are five enclosures, and the tomb of Rakiya is in the fifth. It is of brick, whitewashed.

(3) *Shahdara* is situated on the right bank of the Ravi, about $1\frac{1}{4}$ m. to the N. of the railway bridge. The journey by rail is 5 m. to the Shahdara station, from which the *Tomb of the Emperor Jahangir* is $1\frac{1}{4}$ m. It is more convenient to go by motor (about $5\frac{1}{2}$ m. drive).

Before crossing the railway is seen (right) the tomb of *Nurjahan*, wife of Jahangir, a plain building of one storey; it has been restored and is surrounded by fine lawns and flower-beds.

After crossing the railway a domed building is passed on the right. This is the tomb of *Asaf Khan* (see below); and immediately E. of it is the enclosure, which was the *sarai* or outer court of the mausoleum. An archway of white marble, and 50 ft. high, leads into the garden court of Jahangir's mausoleum, once the Dilkusha garden of the Empress Nurjahan (*Mihr-un-nissa*). The mausoleum consists of a fine terraced platform, not unlike the lowest terrace at Sikandra (p. 280), with four minarets at the corners and a small ruined pavilion over the tomb chamber in the centre.¹

¹ The model of the tomb was that of Iti-mad-ud-daula at Agra (see p. 279).

The passage to the tomb chamber is paved with beautifully streaked marble. The cenotaph is of white marble, inlaid with *pietra dura* work, and stands in the centre of an octagonal chamber. On the E. and W. sides are the ninety-nine names of God, most beautifully carved, and on the S. side is inscribed, "The Glorious Tomb of His High Majesty, Asylum of Pardon, Nur-ud-din Muham-mad, the Emperor Jahangir," 1627 A.D. On the four sides are exquisite screens of lattice-work. The lamp over the tomb was presented by the Maharana of Kotah.

Outside the entrance a staircase leads up to the flat roof of the terrace, covered with a fine marble tessellated pavement. The minaret at each corner is 95 ft. high from the platform. The marble parapet which ran round the pavement was taken away by Maharaja Ranjit Singh, but has been restored. The minarets are four storeys high, and are built of magnificent blocks of stone 8 ft. long. From the top there is a fine view over the Ravi to the city of Lahore.

The **Tomb of Asaf Khan**, brother of the Empress Nurjahan, is an octagon surmounted by a dome. It shows marked Persian influence. It has been utterly ruined and almost entirely stripped of the lovely *kashi* work which once adorned it. In the portals some fragments still remain to show how splendid it once was. The cenotaph is of white marble. The Tughra writing on it is extremely fine, and resembles that on the tomb of Jahangir. The gardens here and round the Emperor's Tomb have been much improved of late. Asaf Khan and his sister had entire control over the indolent Jahangir during the last years of his life. Before marrying Jahangir, Nurjahan was married to an Afghan, Ali Kuli Khan, who lived at Burhanpur. Jahangir

compassed his death, and carried Nurjahan away to Delhi; as she refused to marry him, he imprisoned her in a small palace, and made her an allowance of 14 annas a day. Eventually Asaf Khan persuaded her to marry Jahangir. On his death Nurjahan wished a younger son of the Emperor married to her daughter by her Afghan husband to succeed him; but Asaf Khan stood by Shah Jahan, and the ex-Queen at once retired into private life. Asaf Khan died six years later, having attained to the rank of Khan-i-Khanan and Governor of Lahore; and his tomb was erected by the Emperor, who was himself born at Lahore. Nurjahan survived her brother for four years.

(4) 26 m. W. of Lahore is **Shaikh-pura** (Sheikhupura), formerly Jahangirabad, the hunting-seat of Jahangir and of Dara Shikoh, the eldest brother of Aurangzeb. The road crosses the bridge over the Ravi. Further up-stream the river-pavilion of Kamran has been demolished. The road, at about 4 m. enters a country that has been turned by the Upper Chenab Canal from a jungle into a fair agricultural tract. The Canal is crossed at mile 18. On the way the Deg, a famous local stream, is crossed.

On the left, at Shaikh-pura, is a garden-house built by Rani Nakayan, Queen of Ranjit Singh. At the S.W. corner of the garden is her Samadh, an octagonal building. Over the door is a picture of the ten Gurus, with an inscription. Across the road is a very clean and comfortable house which belongs to the Raja Jagirdar, grandson of Maharaja Teja Singh, and is lent by him to travellers. The Raja resides in the fine old fort here. Shaikh-pura (D.B.) is now the hdqrs. of the district of that name. A new town has sprung up to the W. of the old village.

There is good shooting round about. 3 m. from the town is a fine tank of noble dimensions, and a Deer Tower built by Jehangir for hunting purposes, in commemoration of the death of a favourite antelope. It is now conserved by the Archæological Department.

(5) **Nankana Sahib**, 48 m. from Lahore on the Shorkot Road line of the N.W.R. is the birthplace of Guru Nanak, the founder of the Sikh religion, and is visited annually by large numbers of Sikhs and Hindus.

ROUTE 17.

LAHORE to PESHAWAR and the KHYBER PASS by Gujranwala, Wazirabad Junction (for Sialkot and Jammu), Gujrat, Lala Musa Junction (for Western Punjab), Jhelum, Rohtas, Manikyala, Rawalpindi, Golra (for Khushalgarh and Kohat), Taxila, Hassan Abdal (for Abbottabad), Attock, and Naushahra (for Hoti Mardan and the Malakand).

Lahore to Peshawar Cantonment is 288 m. by the North-Western Railway, and the time occupied in transit 13 hrs.

5 m. from Lahore, **Shahdara** station. The tomb of the Emperor Jahangir, $1\frac{1}{4}$ m. off, is described on p. 367 (Route 16). From here a branch line runs (56 m.) to Sangla Hill (p. 371).

38 m. Here the main Upper Chenab Canal (opened 1913) is crossed.

43 m. **Gujranwala** station (R., D.B. with two suites of rooms) (pop. 38,739). Petrol obtainable.

Headquarters of a District, and the birthplace of Ranjit Singh. At the S.E. corner of the town is the *Samadh of Mahan Singh*, father of the great Maharaja. It is an octagonal building, 81 ft. high to the top of the gilt ornament on the summit. Within are the sculptured rosettes or knobs which mark where the ashes are deposited. The large rosette surrounded by twelve smaller ones is inscribed "Sarkar Ranjit Singh." That nearest the entrance is in memory of a blue pigeon that fell down into the flames in which Ranjit Singh and his concubines were being consumed. Other rosettes mark the ashes of Mahan Singh Padshah, Maharaja Sher Singh, and Sarkar Nau Nihal Singhji. There is a narrow but lofty pavilion, covered with mythological pictures, among which is one of Duryodhana ordering Draupadi (p. lxii) to be stripped. As fast as the clothes were pulled off her she was supernaturally reclothed. At 100 yds. to the E. is the pavilion of Mahan Singh, a handsome building, now used as the reading-room of the town. Close to the market-place is the house where Ranjit Singh was born, with a frieze of geese round the courtyard.

N.E. of the town is the *Baradari*, or pavilion, of the famous General Hari Singh Nalwa, who was killed in January 1837 at Jamrud (p. 387) in action against the Afghans. It stands in 40 acres of garden and grounds. To the E. is a pavilion 12 ft. high, full of small niches for lamps. On the E. wall is a painting of warriors and elephants, now almost gone. At 70 yds. to the N. of the house is the *Samadh* of Hari Singh. The place where the ashes lie is marked by a knob shaped like a budding flower. There are no *sati* memorials. A picture on the wall inside is a portrait of Hari Singh hawking, with a string of ducks passing over his head. The

gardens round Gujranwala are famous for oranges. Gujranwala is known for its iron safes, which are being exported in large numbers.

62 m. **Wazirabad junction station** (R., D.B. with four suites of rooms). This place (pop. 19,051), founded by Wazir Khan in the reign of Shah Jahan, became under the rule of Ranjit Singh, the headquarters of General Avitabile, who built a completely new town on the plan of a parallelogram, surrounded by a wall. A broad bazar runs from end to end. Wazirabad is famous for its cutlery, sword-sticks, and cane-sticks. N. of Wazirabad is the great *Alexandra Bridge* over the Chenab, opened in 1876 by King Edward VII., then Prince of Wales. By the construction in 1922 of a road bridge over the same river, the Grand Trunk road is now bridged throughout from Calcutta to Peshawar, except for a gap over the river Son in Bihar (p. 56).

The Chenab was a most difficult stream to deal with, owing to the sudden furious floods to which it is subject and the absence of a well-defined river-bed.

From Wazirabad a branch line runs N.E. to Sialkot and Jammu.

27 m. **Sialkot station** (D.B.). A town with large military Cantonment 1. m. N. (pop. 70,008). Sialkot has been identified with the ancient Sagala, the capital of the Indo-Greek Menander (the Milinda of the Buddhists) and of Mihirakula the Hun. The *Church* is a striking object, having a steeple 150 ft. high. Near the railway station and the city is a lofty old fort, in which the British residents took refuge on the mutiny of the 46th Bengal Infantry and a wing of the 9th Light Cavalry on 9th July 1857. A number, however, were killed before they could make their escape, and Brigadier-General Brind, commanding the station, died after

reaching the fort of the wounds inflicted on him. Notwithstanding these outrages, the mutinous cavalrymen invited two of the surviving field officers to command them with higher pay and a guarantee of furlough to the hills every hot season! The railway continues to Jammu, and there is a branch from Sialkot S.E. to Narowal, 39 m.

52 m. **Jammu station**. The ry. stn. is 1 m. from the town (D.B., pop. 31,506). This is the winter hdqrs. of the Maharaja of Jammu and Kashmir, and the capital of the Jammu Province. The area of the State covers 80,000 sq. m. with a pop. of 3,322,030 and an annual revenue of nearly 278 lakhs. The present ruler, H.H. General Maharaja Sir Hari Singh, G.C.I.E., K.C.V.O. (born 1895), succeeded in 1925 his uncle, the late Sir Pratap Singh, who was the grandson of the famous Dogra¹ Maharaja, Gulab Singh, to whom Kashmir was made over in 1846, after the First Sikh War. (See Kashmir, Route 18).

The **Old Palace** at Jammu, to the N.E. of the city, has no pretensions to beauty. It is entered by a large irregular quadrangle, on the right side of which is a vast reception-room. The veranda of the small reception-room overlooks the Tawi River.

W. of the city is a temple covered with plates of copper-gilt. A little to the N. of it is the building constructed for the visit of King Edward, when Prince of Wales, in 1876; the Prince of Wales College commemorates that of King George V. in 1905, before

¹ The term "Dogra" was originally applied to the Rajput clans in the hills and submontane tracts to the N. of the river Ravi. In later years it came to include the hill Rajputs to the S. of the Ravi; and in military usage it denotes all such Rajputs who enlist in the Indian Army. The 37th, 38th and 41st Dogras (now the 17th Dogra Regiment) have a fine war record.

he became King. Close by, to the E., is the old parade ground, with the hospital and college to the S.E. The *Gumit Gateway*, by which the city is entered from the River Tawi, is approached by a very picturesque flight of dressed stone steps. A new road leads from below it to the Residency R.H., in the S.E. corner of the city. 2 m. S. of this gate is a fine garden belonging to the Maharaja.

The Banihal route to the Kashmir Valley starts from Jammu (see Route 18). The Ramnagar palace belonging to the Maharaja is picturesquely situated on a high bluff on the river Tauri where the road leaves Jammu town; a suspension bridge crosses the river.

Another branch line S.W. from Wazirabad runs through Sangla, 68 m., to **Lyallpur**, 96 m. (so named after Sir J. B. Lyall, G.C.I.E., Lieutenant-Governor, 1887-1892), to Shorkot Road junction, 163 m., and Multan, 232 m. At Chichoki Mallian junction a line connects with Lahore and another branch runs through the S. of Lyallpur district also to Shorkot Road. These lines are required to convey excess grain to Karachi.

Nankana Sahib (p. 369, Route 16), the famous Sikh shrine is on the line from Chichoki Mallian to Lahore (48 m. from Lahore).

The district of **Lyallpur** is the largest wheat-exporting district in India. Its existence depends on the irrigation afforded by the Lower Chenab Canal, and the area is 3132 sq. m. It contains (1921) a specially-selected population of 979,463 persons. The irrigated area amounts to 1,583,063 acres, producing annually crops valued over £7,000,000. The district is the headquarters of five canal divisions. The Panjab Agricultural College is at Lyallpur.

71 m. from Lahore **Gujrat** station. This pretty place is the administrative headquarters of a

district of the same name. The town (21,274 inhabitants) stands on the ancient site of two earlier cities. The second, according to General Cunningham, was destroyed in 1303 A.D. Two centuries after this Sher Shah was in possession of the country, and either he or Akbar founded the present town. Akbar's fort stands in the centre of the city. It was first garrisoned by Gujars, and took the name of **Gujarat Akbarabad**. Akbar's administrative records are still preserved in the families of the hereditary registrars. During the reign of Shah Jahan, Gujrat became the residence of a famous saint, Pir Shah Daula, who adorned it with numerous buildings. In 1741 the Ghakkars established themselves at Gujarat, and in 1765 the Sikhs acquired the country. The **Civil Station**, in which is the D.B., lies to the N. In it are a Church of Scotland Mission Church and Schools.

The Battlefield.—The decisive Battle of Gujrat, which ended the Second Sikh War, was fought on the 21st of February 1849. The two villages of Kalra, 2½ m. S. of the D.B., were the key of the Sikh position. They are situated in a flat plain, where there are no natural advantages to assist an army in maintaining its position. Lord Gough's camp had been at Wazirabad, but upon being joined by the force which had captured Multan under General Whish, he moved it to Shadiwal between 17th and 19th February. Thence at 7 A.M. on the morning of 21st February the British army of 25,000 men and nearly 100 guns, advanced on the Sikh position at Kalra. The artillery went to the front and poured their fire on the Sikh army, which comprised six brigades of infantry with fifty-nine guns, and four great bodies of Sikh cavalry with 4000 Afghan horse. The heavy English guns opened on the Sikhs at 1000 yds., and

crushed their lighter metal. As the Sikh fire ceased, the British field-batteries were constantly pushed forward. By 11.30 A.M. most of the Sikh guns had been withdrawn, dismounted, or abandoned. The British infantry then advanced, deployed, and drove the Sikhs from their position in Kalra. There was no attempt to make a further stand at Gujrat, and the Sikh army streamed away in utter defeat to the E. and W. of the town, which was occupied by one o'clock. The British losses were only 766.

Next day General Gilbert, with 12,000 men, started in pursuit of the enemy, and at Rawalpindi received the submission of the entire Sikh army.

In the cemetery at *Shah Jahan-gir*, called after a fakir of that name, are the tombs of those who fell in the battle. Beyond, to the E., are two mosques, one of which is rather remarkable. Gujrat is one of the starting-places for Kashmir (see Route 18).

82 m. **Lala Musa junction station (R.).**

The Sind-Sagar line runs, 345 m., from here to Sher Shah junction, S. of Multan (p. 403).

At 21 m. **Chilianwala** was fought, in the Second Sikh War, on 13th January 1849, the most desperate of all the battles between the British and the Sikhs. The Sikhs advanced from their position on high ground between Rasul on the N. to Moong on the S., and opened a heavy fire on the British troops, and Lord Gough ordered a general attack on them, though only a very short time of daylight remained. In making this the two brigades on the left under Sir Colin Campbell became separated, and that of General Pennycuik was badly checked, and finally had to fall back, while the absolute failure of the cavalry on the right of the British line exposed the

divisions there to a flank attack, which prevented their advance. Finally the troops were recalled, the British losses being 2238, and several British guns were captured. On the Sikh side from 20,000 to 25,000 men were engaged, and on the British side 14,000. A full view of the field may be obtained from the obelisk erected on the mound to the E. of it, from which Lord Gough watched the battle. Alongside of the obelisk is a cross and a small cemetery, in which General Pennycuik and his son and the officers of H.M. 24th Regiment, which suffered most of all, and other officers who fell at Chilianwala, are buried.

According to General Cunningham, Alexander crossed the Jhelum somewhere in the neighbourhood of Rasul and Moong, and defeated Porus in 326 B.C., not very far from the field of Chilianwala.

Other stations on the Sind-Sagar line are 45 m., Malakwal junction (from which a short line of 18 m. runs to Bhera and a longer one to Sargodha, 47 m., and Jhang, 116 m., in the Jhelum Canal Colony, and thence Multan), 51 m., Haranpur (for the Khewra salt mines), 57 m., Pind Dadan Khan, 107 m., Khushab (for Shadpur), 120 m., Mitha Tiwana (the headquarters of the famous Tiwana horsemen), 158 m., Kundian (where the line from Campbellpur (p. 381) joins in), 209 m., Darya Khan (for **Dera Ismail Khan**, 12 m. distant across the Indus, headquarters of a frontier district; Decauville Ry. from D.I.K. to Tank City. Sir H. M. Durand, Lieutenant-Governor of the Punjab, 1870-71, who lost his life on 1st January 1871 from an accident at Tank, is buried in the churchyard at D.I.K.), 320 m. Mahmud Kot (for **Dera Ghazi Khan**) and, 336 m., Muzaffargarh. Between Kundian and Mahmud

Kot the table-rock of the Takht-i-Sulaiman, the "Throne of Solomon," 12,300 ft., can be seen on the W. horizon on clear days.

The only ruins of much antiquity and interest to be found in the Dera Ismail Khan District are the two forts of **Kafir Kot**, close to Bilot, situated on small hills attached to the lower spurs of the Khasor range, and overlooking the Indus. There is, however, no metalled road to the place, and a visit is likely to be attended with considerable difficulty. The main features of these forts are an outer defensive wall, consisting of rough blocks of stone, some of great size, and various groups of building, inside resembling small Hindu temples, and more or less carved. The area of these forts is considerable, and they could have held a good-sized garrison. Traces are still to be seen of their arrangements for raising water from the Kachi below. No legends are attached to them beyond that they are supposed to have been occupied by the last of the Hindu Rajas, Tel and Bil. These forts certainly point to the existence, in times before the Muhammadan invasion, of a Hindu Raj in this corner of the District possessed of considerable resources and architectural skill.

Beyond **Kharian** (92 m. from Lahore on the main line to Peshawar) the ry. traverses a curiously broken tract known as the Pabbi, which is being afforested, and crosses the Jhelum River by a fine bridge, affording a grand view of the snows of the Pir Panjal and of the town on the N. bank.

103 m. Jhelum station (R., D.B.), is a modern town situated on the right bank of the Jhelum River (pop. 14,422 in the town and 3638 in Cantonment) and the administrative headquarters of a district of the same name, built on an ancient site. The Civil

Lines and Cantonment lie 1 m. E. and W. of the town respectively. The attempt to disarm the 14th Bengal Infantry here on 7th July 1857 was badly mismanaged, and resulted in the loss of valuable lives. Many ancient pillars have been dug up near the railway station, and amongst them one with a human face in the Greek style, which is now in a Lahore museum. Another is to be seen in the railway engineer's compound. The present town is of modern origin, the old town, which may have been the Bucephala of Alexander, having been on the left or opposite bank of the river. The place possesses a civil hospital, an Anglo-Vernacular Middle School of the A.P. Mission and a Government High School. The A.P. Mission also maintains a hospital for women.

Jhelum is an important timber-depot. The timber cut in the Kashmir forests is floated down the river and collected here.

Tangrot, on the Jhelum River is a well-known place for *mahsir* fishing, some 28 m. from Jhelum.

Rohtas is 12 m. N.W. of Jhelum. Carriage-road to the Kahan River 8 m., and after that a cart-track along the river, and then a bridle-path below barren hills 200 ft. high. This famous fort, which is partly visible from the railway, stands on a hill overlooking the gorge of the Kahan River. Its walls extend for 3 m. in places from 30 ft. to 40 ft. thick, and enclose about 260 acres. It was built by Sher Shah in 1452 as a check on the Ghakkar tribes. There are 68 towers and 12 gateways. The entrance, up a steep path, is by the Khawas Khan Gate, on the N.E. of the hill. The Sohail Gate (where is the R.H.) is on the S.W. It is a fine specimen of the Pathan style, over 70 ft. in height, with balconies on the outer walls, and is reached through the town, with

a deep fissure on the left, and on the right an inner wall with a lofty gateway, called after Shah Chand Wali. Within this stand the ruins of Man Singh's palace, built after he occupied Kabul (1585). The S.W. corner is a lofty baradari, with a stone finely carved with figures of birds, etc. In the S.E. corner, 150 ft. off, is a smaller barahdari, about 25 ft. high. The wall between the two is gone. There were twelve gates to the fort, but they are now nearly all in ruins. The Shisha Gate (an inner gate) was so called from the Harim's Hall of Mirrors, which adjoined it.

The gradients of the line between Jhelum and (135 m.) Sohawa are very considerable, and the alignment has been several times changed. The scenery of the East extremity of the Salt Range, through which the line passes, is very wild in parts.

Tilla, an Eastward continuation of the Salt Range, 3242 ft. above the sea. The hill is sometimes used as a summer resort by officers of Jhelum District. A famous monastery of Jogi fakirs, one of the oldest religious institutions in N. India, is situated here.

Katas.—A sacred pool in the centre of the Salt Range, 15 m. N. of Pind Dadan Khan, at an elevation of over 2000 ft. It is visited every year by thousands of pilgrims, who come to bathe in its waters. The Brahmanical story is that Siva, being inconsolable at the death of his wife, Sati ("The True One"), tears rained from his eyes and formed the two pools of Katás, or Kataksha ("Raining Eyes"), and Pushkar, near Ajmer. At the foot of Kotera, the W. hill, are the remains of twelve temples, clustered in a corner of an old fort. These are called the *Sat Ghara*, or seven temples, and are popularly attributed to the Pandavas,

who are said to have lived at Katás during a portion of their seven years' wanderings. The picturesque village of **Choa Saidan Shah**, which contains a good R.H., is noted for roses and the attar made from them. Khushab, on the right bank of the Jhelum, is a place of great antiquity.

Jalalpur.—Another ancient site on the right bank of the Jhelum River (pop. 2690). The village was identified by Sir Alexander Cunningham with the site of the ancient Bucephala, built by Alexander the Great in memory of his famous charger, which was killed in the battle with Porus at the crossing of the Jhelum; but doubts have been cast on the identification. Jalalpur is now the seat of one of the leading Muslim "Pirs" of the Panjab, and is annually visited by a large number of disciples at the time of the *Urs* (anniversary of the death of the founder).

Malot.—A fort and temple on a precipitous spur projecting from the Southern edge of the Salt Range, about 9 m. from Katás. The fort is said to have been built five or six centuries ago by Raja Mal, a Janjua Chief, whose descendants still hold the village. The temple, with its gateway, stands on the extreme end of the cliff. They are in the earlier Kashmiri style, built of coarse red stone, much injured by the action of the weather. The temple is 18 ft. sq. inside, with remarkable fluted pilasters and capitals, on each of which is a kneeling figure.

Siv Ganga, 3 m. N.E. of Malot. In it stands a small temple in the later Kashmiri style, and near Warala, a hamlet on the adjacent spur, a Buddhist sculpture was found by the villagers some years ago and set up by Hindus in a small temple at Siv Ganga. It having at some time been

broken, and thus rendered useless for purpose of worship, the Hindus allowed its fragments to be sent to the Lahore Museum, where it was restored. The relief originally contained eighteen or nineteen figures, the central one, a Bodhisattwa, carved in a somewhat late stage of Gandhara art.

Nandana.—A place of historical interest in the Pind Dadan Khan tahsil of Jhelum District, 14 m. W. of Choa Saidan Shah, in a remarkable dip in the outer Salt Range. Near by are extensive remains of a temple, a fort, and a large village. The temple is in the Kashmiri style, but faces W. instead of E., as temples of that style usually do. Of the fort two bastions of large well-cut sandstone blocks still remain. Nandana is mentioned as the objective of one of Mahmud of Ghazni's expeditions in 1014. Early in the 13th century it was held by Kamruddin Karmani, who was dispossessed by a general of Jalaluddin Sultan of Khwarizm. The latter was defeated on the Indus in 1221 by Chingiz Khan, one of whose officers—Turti, the Mongol—took Nandana and put its inhabitants to the sword. It appears in the list of places conquered by Altamsh, who entrusted it to one of his nobles.

Mayo Mine.—A famous salt mine at Khewra, in the Pind Dadan Khan tahsil: it would be well to write beforehand to the Manager for facilities to visit it. There are three R.Hs. for the accommodation of travellers. When the salt was first worked is not known, but excavations existed on the spot as far back as the time of Akbar, and the miners have a tradition that their first settlement dates from the 6th century of the Muhammadan era. The existing mine was named after Lord Mayo in 1870. It is estimated that 534,512 tons had been excavated up to 1850, and from

that year to the end of March 1923 the output was 4,791,418 tons. It is calculated that a further supply of 7 million tons is easily accessible in the part of the hill which has been explored, and that large quantities exist in its unexplored parts beyond the limits of the existing mine. The mine has a maximum length of 1405 ft., and is 3000 ft. broad at its widest part. Three tramways run through the mine, two of them being connected by a self-acting incline, on which the loaded draw up the empty trucks. The revenue (duty) realised from the sale of salt is about 46 lakhs.

155 m. on the main line from Lahore to Peshawar **Mandra Jn.**, branch for Bhaun, 47 m.

163 m. **Mankiala** station is the nearest point to Manikyala Tope, which is 1 m. distant.¹

Manikyala was first noticed by Mountstuart Elphinstone in 1815, and afterwards thoroughly explored by General Ventura in 1830. In 1834 the stupa was explored by General Court,² and thirty years after by General Cunningham. The date is uncertain. There are coins taken from it of Kanishka and Huvishka, which date from the beginning of the Christian era, but with them was found a coin of Yaso Varmma, who reigned not earlier than 720 A.D., and many silver Sassano-Arabian coins of the same period. General Cunningham thinks that the stupa may have been originally built by Huvishka, who deposited coins of his own reign and of his predecessor Kanishka, and that the stupa, having become ruinous, was rebuilt in its present massive form by Yaso Varmma, who re-deposited the relic-caskets with

¹ Cunningham's *Archaeol. Rep.*, 2, 152; Fergusson's *Ind. Arch.*, 1, 94; James Prinsep's *Journal*, vol. 3.

² Ventura and Court were European officers in the service of Ranjit Singh.

the addition of a gold coin of himself and several contemporary coins of Arab governors.

The dome of the stupa, which was probably about 100 ft. high, is an exact hemisphere, 127 ft. in diameter. The outer circle measures 500 ft. in circumference, and is ascended by four flights of steps, one in each face, leading to a procession path 16 ft. in width, ornamented both above and below by a range of dwarf pilasters, representing the detached rail of the older Indian monuments.

Fergusson says (I, 96): "It is, indeed, one of the most marked characteristics of these Gandhara topes that none of them possess, or ever seem to have possessed, any trace of an independent rail; but most have an ornamental belt of pilasters, joined generally by arches simulating the original rail. This can hardly be an early architectural form, and leads to the suspicion that, in spite of their deposits, their outward casing may be very much more modern than the coins they contain."

At 2 m. to the N. of Ventura's Tope is Court's Tope. Here the earth is of a bright red colour, and General Cunningham identifies this stupa with that mentioned by Hiuen Tsang as "the stupa of the body-offering"; while at 1000 ft. to the S. of it is Hiuen Tsang's "stupa of the blood-offering," which that pilgrim ignorantly attributed to its being stained with the blood of Buddha, who, according to a curious legend, is said (in a previous existence) to have offered his body to appease the hunger of seven tiger cubs. The stupa of the body-offering was opened by General Court, who found in a stone niche, covered by a large inscribed slab, three cylindrical caskets of copper, silver, and gold, each containing coins of the same metal; four gold coins of Kanishka were found in the gold box; in the silver box

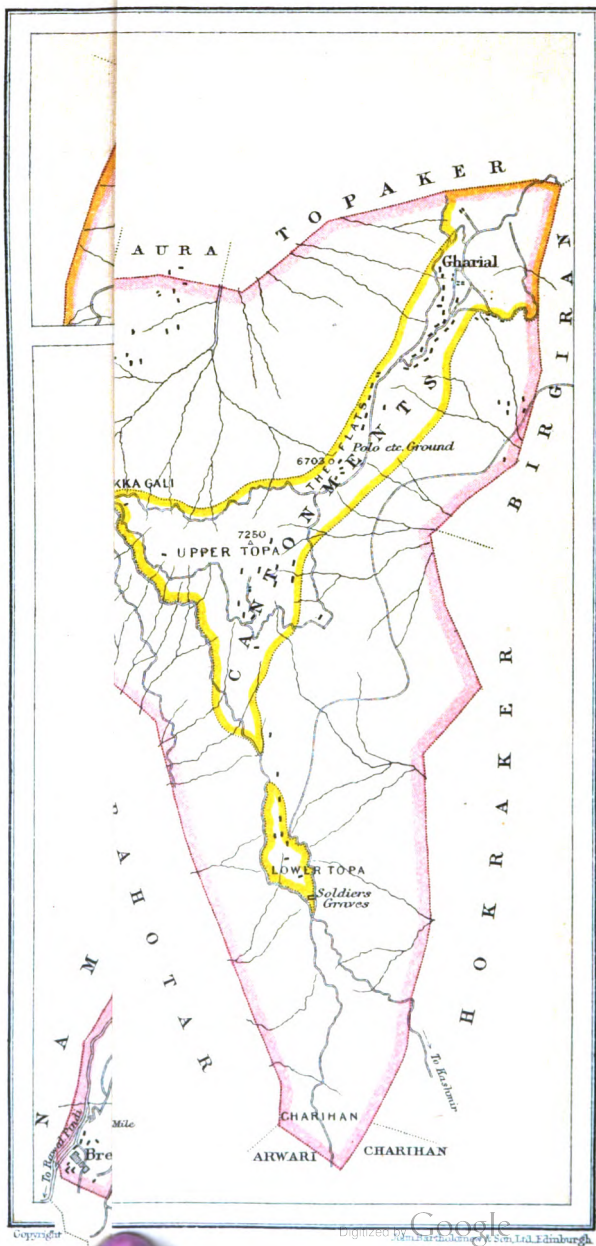
were seven silver Roman denarii of the last years of the Republic, the latest being M. Antonius Triumvir, and therefore not earlier than 43 B.C. The eight copper coins in the box belonged to Kanishka and his predecessors. The inscription has been studied by M. Senart and Professor Lüders.

General Cunningham ran trenches across the mound which now represents the monastery, and brought to light the outer wall and cells of the monks, forming a square of 160 ft.

179 m. Rawalpindi Cantonment junction station,* (D.B., Hotels, R.). This is the headquarters of a Civil Division and District, and of the 1st Indian Army Division (Rawalpindi District). The Cantonment is one of the largest military stations in India, and has been surrounded by a chain of detached forts, which have since been dismantled. The city and Cantonment have a population of 101,142, the majority of whom are Muhammadans. It received its name from Jhanda Khan, Ghakkar Chief, who restored the town of Fatehpur Baori, destroyed by an invasion of the Mughals in the 14th century. A very fine Mall runs for 4 m. through the station, forming part of the Grand Trunk Road. Near the club is a memorial statue of the late Queen Victoria. The *English Church* is about 1 m. from the railway station, and near by is the *Scotch Church*. The *Fort* is about $\frac{1}{2}$ m. S. of that again. The *Public Garden* by this is a park of 40 acres, with a low forest well preserved, and close by are the *Golf Links* (18 holes). The town has nothing very remarkable in it.

Rawalpindi is the starting-place for Murree,* 37 m. distant; motor and tonga services. Fare per seat in motor-mail service, Rs.12. There are two D.Bs. on

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the road—one at Barakao, 13 m., and the other at Tret, 26 m. from Rawalpindi. Murree is the headquarters of the Northern Command. Barracks were erected in 1853. The houses are built on the summit and sides of an irregular ridge, and enjoy magnificent views over forest-clad hills into deep valleys, studded with villages and cultivated fields, with the snow-covered peaks of Kashmir in the background. On the S.E. is the Lawrence School for the children of English soldiers. The highest point of the station is 7507 ft. above the sea-level, and the loftiest peaks behind the sanatorium attain a height of over 9000 ft. The climate is well adapted for Englishmen, the lowest recorded temperature being 21°, the highest 96°. Visitors should consult the Municipal Office for information.

The pop. of Murree was at the census in March 1921 only 3292, but in the summer season rose to 15,824. There is very little game now to be found in the hills. The camps and small stations in the hills N.W. of Murree, known as the Galies (Barian, Ghora Dacca, Khanspur, Doonga, Changlagali, Khairagali, and Nathiagali), are most conveniently reached from Murree. The most Northerly of them, Nathiagali, is the summer residence of the Chief Commissioner of the N.W. Frontier Province. The walks through the Galies are lovely in spring—nothing in the whole Himalayas is more beautiful. The roads from Abbottabad (p. 381) are not suitable for wheeled traffic.

Rawalpindi is also the starting-place for Kashmir by Murree and the Jhelum Valley. This is the best route into the country (see Route 18). Official publications showing the rates for transport to Kashmir available at the Ry. Stn.

9 m. beyond Rawalpindi, on an eminence above the little Margala

Pass, is the monument of General John Nicholson, with the following inscription :—

“ Erected by friends, British and Native, to the memory of Brigadier-General John Nicholson, C.B., who, after taking a hero's part in four great wars, fell mortally wounded, in leading to victory the main Column of assault at the great siege of Delhi, and died 22nd September 1857, aged 34.”

188 m. **Golra** junction for the line to Khushalgarh. 79 m. from Rawalpindi, Kohat, 111 m., Hangu, 137 m., and Thal, 173 m., at the entrance to the Kurram Valley. At Basal (56 m.) the line is crossed by that from Campbellpur (p. 381), which, with the Sind-Sagar Railway, serves the whole of the left bank of the Indus. From Kalabagh Ghat, in continuation of a branch line from Daud Khel (91 m. from Campbellpur) to Mari Ghat, a light railway links up with (87 m.) **Bannu**, a cantonment commanding the Tochi route, whence it is 73 m. by road to **Rasmak**. At Khushalgarh (79 m.) the Indus is crossed by a cantilever bridge, with a roadway over the railway, the river flowing through a deep, bold gorge; the railway from this point to Kohat has been converted to the broad gauge: beyond Kohat, as far as Thal, the line is of the 2 ft. 6 in. gauge. On the N. side of the road at Kohat are the hills of the Jowaki Afridis, against whom a campaign was waged in 1875-6, and N., beyond Kohat, is the Samana Range of the Orakzai, against whom campaigns were undertaken in 1889 and 1892, and again on the occasion of the Tirah Afridi expedition in 1897. The tribal territory of the Adam Khel Afridis N. of Kohat is traversed by the Kohat Pass Rd. (40 m.) to Peshawar, open to traffic of all description and since the Ellis abduction case¹ in the spring of 1923 equipped with

¹ See *Tales of Tirah and Lesser Tibet*, by Mrs Lillian A. Starr (Hodder & Stoughton, 1924).

telephone and telegraph lines. The Kurram Valley, to which the route beyond Thal leads, was detached from Afghanistan in 1879, but was not taken under direct British management till thirteen years later. The Safed Koh Mountains, with the grand peak of Sika Ram, rise magnificently along the N. side of the valley. (See *Among the Wild Tribes of the Afghan Frontier*, by T. L. Pennell, Seeley, Service, 1922).

194 m. **Taxila (Saraikala)** junction (D.B.) for the line to Havelian ($9\frac{1}{2}$ m. from Abbottabad, see p. 381), and station for the ruins of Taxila (ancient *Takshasila*). Refreshment and waiting-rooms at station and small P.W.D. Bungalow about 1 m. away, permission to occupy which may be obtained from the Executive Engineer, Rawalpindi District. Near the station is the Archæological Office, where permits can be had to view the excavations. (See *Guide to Taxila*, by Sir John Marshall, 1921, obtainable at the Office.) The remains of Taxila lie to the E. of the railway and are spread over an area of some 25 sq. m. Besides other monuments they comprise three distinct cities. The earliest of these is situated on the Bhira mound (at the N. end of which stand the Archæological Office and bungalow), and was in occupation probably from the second or third millennium B.C. until about 180 B.C. The second city, known as Sirkap, is on the further side of the Tamra Nala (*Tibero-nalo* or *Tibero-potamos* of the Greek historians), and appears to have been built by the Greeks and to have been occupied successively by the Greeks, the Scythians, the Parthians and the early Kushans. The third city, now called Sirsukh, about 1 m. N.E. of Sirkap, was probably founded by the Great Kushan Emperor Kanishka (2nd century A.D.) and flourished for

some five centuries or more. It was in this city that the Chinese pilgrim, Hiuen Tshang, sojourned and from it that the distances and directions to the various monuments described by him are calculated. Besides these three cities, to each of which the name of Taxila (*Takshasila*) was transferred in succession, various other outlying monuments have been excavated, the most important among them being the Dharmarajika Stupa near the village of Shahpur, on the S. side of the Hathial spur, a massive temple with Ionic pillars at Jandial, and two groups of Buddhist buildings, the one in a defile in the hills near the village of Mohra Moradu, about 1 m. S.E. of Sirsukh, and the other on a hill near the village of Jaulian, about twenty minutes' walk from it.

To visit all the remains now brought to light at Taxila two days are required. The roads are metalled, and are suitable for motor-cars. A "Bareilly" cart can generally be obtained at Saraikala, but it is advisable to arrange for it in advance. In this and other matters the Overseer of the Archæological Bungalow gives whatever assistance he can. Assuming that a visitor has only five or six hours to spare, a good plan is to drive to the Dharmarajika Stupa, thence walk (about $1\frac{1}{2}$ m.) through a defile in the hills to the stupa of Kunala, and afterwards descend into the city of Sirkap. The conveyance can meanwhile go round to the N. side of Sirkap, and having rejoined it the visitor can drive to the Temple of Jandial, and thence to Mohra Moradu and Jaulian. Inspection must not be omitted of the interesting exhibits in the **Museum** (opened in April 1928).

The remains at the **Chir Tope** (ancient name *Dharmarajika stupa*) comprise a large number of Buddhist stupas, chapels and monastic

dwellings. In the centre is the Main Stupa, erected in the 1st century B.C., but subsequently enlarged and repaired. The decorative stone facing on the E. side dates from about the 4th century. Around the main edifice there originally stood a circle of small stupas, but, as they fell to decay, a series of chapels was constructed on their ruins, and numerous other stupas and chapels were erected round about, with a monastery (not yet excavated) to the N. The buildings on this site are of special antiquarian interest, as they are constructed in various styles of masonry, and as their relative ages have been ascertained they offer reliable data for fixing the age of many other monuments in this part of India. Among them the visitor should notice in particular the chapel in the N.E. corner with the remnants of a colossal figure of the Buddha which once stood between 30 ft. and 40 ft. in height, a small apsidal temple on the W. side of the Main Stupa, and a chapel not far from it, where relics of the Buddha, accompanied by an inscription on a silver scroll (of the year 136), were discovered.

The **Stupa of Kunala** is said to have commemorated the spot where Kunala, the son of the Emperor Asoka and Viceroy of Taxila, had his eyes put out through the guile of his step-mother Tishyarakshita. The story, which resembles that of Phædra and Hippolytus, is told by Hiuen Tshang. The original monument on this site is only about 10 ft. in height, and can be seen emerging from the core of the larger structure on its W. side. It dates probably from the 1st century A.D.; the larger structure was built around it in the 4th century A.D. and extended over the ruins of the ancient city wall. An exceptional feature of this later stupa is the inward curvature of the walls—an idea which was perhaps borrowed from the Greeks but mis-

applied. Immediately to the W. of the stupa is a spacious monastery. From the Kunala stupa a fine bird's-eye view can be obtained of the lower city of Sirkap and the broad Haro Valley beyond. The monument about 5 m. distant on the last spur of the hills bounding the valley on the N., is the famous **Stupa of the Head-gift**, now known as the Bhallar stupa, in the monastery belonging to which Kumārābda composed his Buddhist treatise.

The remains excavated in **Sirkap** comprise the main street running N. and S., with the fortifications at its N. end and a variety of buildings separated by lanes laid out with considerable regularity. The buildings now visible on the surface belong mainly to the Parthian and early Kushan period. Beneath them are other buildings of the Scythian period and below these again others of the Greek period. Among the latest remains are a number of houses, several small shrines, believed to be Jaina, a large Buddhist apsidal temple, and a palace closely resembling in plan the palaces of Assyria. The houses were two- or three-storeyed and divided into several open courts, with a series of chambers around each. Their size suggests that they were occupied either by several families or by professors with their numerous pupils, for Taxila was the most famous seat of learning in ancient India and attracted students from far and near. A curious feature of the houses, which is noticed also by Philostratus in his *Life of Apollonius*, is that the rooms on the lowest floor are in the nature of *taikhanas*, access to which was provided by trap-doors from the chambers above. Large numbers of antiquities, including all sorts of domestic utensils, have been found in the buildings. Noteworthy among them are an Aramaic inscription of about 400 B.C., a head

in silver of the Greek god Dionysus, a bronze statue of Harpocrates, the Egyptian child-god of silence, and a fine collection of gold jewellery, including good specimens of Greek workmanship.

The **Temple at Jandial** dates from about the beginning of the Christian era, and is planned like a Greek temple, with the addition of a solid tower or *ziggurat* between the *naos* and *opisthodomos*, from which the rising and setting sun could be observed. This and other considerations (notably, the absence of images) point to the conclusion that it was a temple of the Zoroastrian fire-worshippers, who must have been numerous at Taxila during the Scythic and Parthian periods. It is possible that this is the temple described by Philostratus where Apollonius is said to have waited before entering the city of Taxila, though it does not tally with his descriptions in all particulars.

The Buddhist stupas and monasteries at **Mohra Moradu** and **Jaulian** are the best-preserved monuments of their kind and age in India. Those at *Mohra Moradu* were first erected in the 2nd century A.D., but largely renovated and repaired two or three centuries later; it is to the later period that the images and reliefs which adorn the walls belong. The monastery was two-storeyed and consisted of a spacious court surrounded by cells, with several additional chambers on its E. side. One of the latter served as a bath-room and another as a refectory. In one of the cells of the larger court is a perfect specimen of a stupa, with all its umbrellas complete, and in the same court are several interesting groups of stucco figures. The main stupa to the W. of the monastery is chiefly remarkable for the masterly stucco reliefs of the Buddha and his attendants, which still survive on its S. side. From it a charming view is ob-

tained of the Mohra Moradu gorge and valley of the Haro below. The remains at Jaulian are of the same character as those of Mohra Moradu, but the stupa is enclosed by courts surrounded by a series of chapels, and there are numerous smaller stupas adorned with a wealth of stucco reliefs. On the other hand, none of the sculptures here is so masterly as that at Mohra Moradu. In one of the smaller stupas (to the S. of the main edifice) was discovered a remarkable relic casket of lime plaster, painted and studded with gems. Among the antiquities found in the monastery was a half-charred manuscript of birch bark.

209 m. by rail from Lahore is **Hassan Abdal** station (D.B.), famous for the so-called *Lalla Rookh's*¹ tomb, which is close by; also on account of the spring of *Baba Wali*, or, as the Sikhs call it, Panja Sahib. Baba Wali was a Musalman saint, and one version of the legend is that Baba Nanak, the founder and Guru of the Sikhs, had a dispute with Baba Wali, and summoned the spring from the top to the bottom of the hill by placing his hand on the rock and invoking it. (The impression of Guru Nanak's hand is said to have remained ever since, and at one end of the tank there is a rude representation of a hand in relief on a rock, from underneath which the water flows into the tank.) This is one of those attractive places to which each religion in succession has attached its legends, and it has been appropriated in turn by Buddhist, Brahman, Muhammadan, and Sikh. The shrine of the Musalman saint Pir Wali Kandahari is on the peak of a lofty and precipitous hill, at the N.W. foot of which numerous springs of limpid water gush out of the ground.

¹ The last poem in *Lalla Rookh*, that of the "Fair Nurmahal," was recited by the disguised Prince at Hassan Abdal.

The Panja Sahib is at the E. entrance to the town, on the right hand, about $\frac{1}{2}$ m. from the D.B. The road to it through the town passes through roughly-paved streets, and then leads down to a clear, rapid brook, crossed by stepping-stones. A Sikh temple has been constructed at the tank, which is a beautiful pool of water canopied with mulberry and pipal-trees of large size, and full of mahsir, some of them as big as a 15-lb. salmon. The walk now leads some 250 yds. along the stream, past some ruins of Jahan-gir, and past another pool, to Lalla Rookh's tomb, which is very plain, and stands in a garden surrounded by a wall, with four slim towers, one at each corner; the enclosure is well filled with trees, amongst which is a cypress more than 50 ft. high.

At Haripur, 20 m. from Hassan Abdal, is a memorial to "Colonel Canora," who was killed defending his guns against the Sikh insurgents in 1848. "Canora" is a corruption of Kennedy. He was a deserter from the Navy who became a colonel in the Sikh service, and with Holmes, Foulkes, and other European officers, lost his life in the anarchy which followed the death of Ranjit Singh.

From Hassan Abdal to Abbottabad (D.B.), 44 m. by metalled road; *viâ* Havelian. This is the motor road to Abbottabad. (See Chap. I., *Topee and Turban*, by Lt.-Col. Newell, 1921.) A branch line of the N.W.R. runs from Taxila Jn. on the main line to Havelian, 9 $\frac{1}{2}$ m. from Abbottabad. The shortest route to Abbottabad is now by motor cab, lorry or tonga from Havelian. Abbottabad is a pretty hill station, about 4000 ft. in elevation, the headquarters of a brigade of Gurkha Infantry and Mountain Artillery. The name is derived from Major James Abbott, who (1849-53) pacified the district on its first annexation.

• There is a metalled road through Abbottabad to Kashmir, *viâ* Domel, and, though there is no regular tonga service, the journey can be performed by tonga, if ordered in advance, or by motor (Route 18).

The following hill stations are reached from Abbottabad by roads not practicable for wheeled traffic:—

Thandiani	.	.	16 m.
Nathialgali	.	.	21 m.
Dungagali	.	.	23 m.
Changlagali	.	.	30 m.

There are hotels at Abbottabad, Dungagali, and Changlagali. Pack and coolie transport can be obtained by applying 10 days in advance to the Contractor at Abbottabad.

230 m. from Lahore on the main line to Peshawar is **Campbellpur**. There is a Cantonment here. Campbellpur is also the headquarters of the Attock district, and the starting-point for the line to Kundian (p. 372).

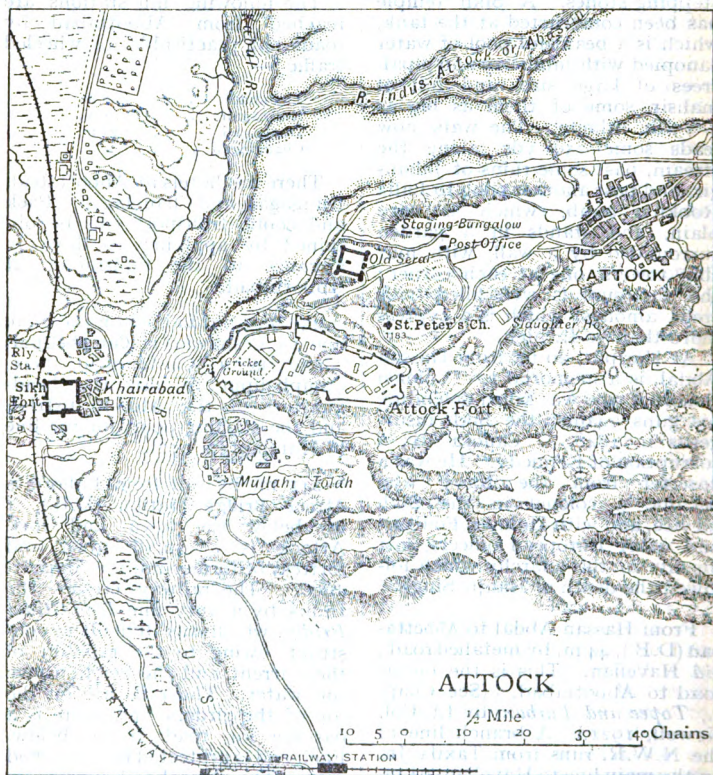
241 m. by rail from Lahore is **Attock Bridge** station (D.B.), 1 m. below the town and fort. Attock is a small town and fortress of former military importance. The railway crosses the Indus by a very fine *Iron Girder Bridge*, which was difficult to construct, owing to the rapidity of the current and the height above the water. The rails are on the top of the girders, and there is a passage for road traffic below. Each end is protected by a fortified gate. The river has been known to rise 90 ft. in flood near the fort, where the channel becomes very narrow.

The **Fort**, situated on a commanding height, overhanging the E. bank of the Indus, and a little to the S. of the point where it receives the *Kabul River* on the W. bank, is very extensive, and has a most imposing appearance. It

was built by the Emperor Akbar in 1586, who also established the ferry which it commands. Maharaja Ranjit Singh occupied the place in 1813, and it remained in the hands of the Sikhs till the British conquest of 1849. It is

the S. divides the sarai from the higher hill on which the fort stands. S. of the fort is another ravine, which separates it from the village of Mullahi Tola, the ferrymen's quarter.

The hills that line the river near



now held by an Indian infantry detachment. Leave can be obtained to walk round the ramparts; this is well worth doing on account of the picturesque views to be obtained, which extend N.W. as far as the distant peaks of the Safed Koh.

To the N. of the fort is an old sarai, now in ruins. A ravine to

Attock have old round towers and ruined forts dotted about them, and the Attock Fort, seen from them, resembles an ancient baronial castle. Some years ago a very strong fortified position was created on the hills on both sides of the river, but this fortification is probably now rather out of date.

Outside the fort, to the W., is the tomb of a Diwan of the saint Abdul-Kadir Gilani. It stands in a small enclosure on the edge of a cliff.

Local arrangements can sometimes be made for a trip by boat down the Indus to Khushalgarh, or to Kalabagh and Mari, which will afford picturesque views of the deep, dark gorges of the Indus.

244 m. **Khairabad station (R.)**, fine retrospect of a railway bridge and the Attock Fort.

261 m. **Naushahra (Nowshera) station (D.B.)**, is the headquarters of a subdivision of the same name in Peshawar District, on the right side of the Kabul River. The Cantonment is on the banks of the river. About 2 m. distant on the Grand Trunk Road is a ruined fort built by the Sikhs.

From Naushahra a light railway runs past the modern cavalry Cantonment of Risalpur and (15 m.) Hoti Mardan to Dargai (41 m.), at the foot of the Malakand Pass, now a fortified position, which was the scene of severe fighting in the Chitral campaign of 1896 and in the subsequent rising of the Swat tribes. 10 m. beyond the Malakand crest, on the farther bank of the Swat River, is the Fort of Chakdarra, so desperately defended against the Swat tribes in 1897. The country round is full of ruined Buddhist remains and sculptures. Many beautiful specimens were secured by Sir Harold Deane, late Chief Commissioner of the N.W. Frontier Province, and a number of them are to be seen in the museum at Peshawar.

Hoti Mardan is the headquarters of Queen Victoria's Own *Corps of Guides*. The officers' mess contains a very fine collection of Græco-Buddhist sculptures, partly found in the digging of the Swat Canal (see A. Foucher, *Sur la*

Frontière Indo-Afghane, Paris, 1901).

7 m. N.E. of Hoti Mardan is the famous rock of Shahbazgarhi, 24 ft. by 10 ft., situated about 80 ft. up a slope, with one of the great Asoka inscriptions (Introd., p. lxxxix). As at Mansehra (p. 399) the script is Kharoshthi, a form of Aramaic character, introduced from Persia about 500 B.C.

At 24 m. from Naushahra, at Takht-i-Bahai, an isolated hill rising 650 ft., are the remains of a Buddhist monastery (see Ferguson's *Indian Architecture*, I, 210), and another at Shahr-i-Bahlol at its foot. Shahr-i-Bahlol has been further excavated lately, and a large number of fine Buddhist carvings, images, and sculptures found there and at Takht-i-Bahai are in the Peshawar Museum.

274 m. **Pabbi station**. 23 m. from here is **Cherat (D.B.)**, a hill Cantonment and sanatorium for Peshawar, 4500 ft. above sea-level. The temperature seldom exceeds 90° even in the hottest season. A mail tonga runs between Pabbi and Cherat twice daily in the hot weather.

285 m. **Peshawar City station**.

288 m. **Peshawar Cantonment station*** (R., D.B.). This place, lat. 34° 1', long. 71° 37' (104,452 inhabitants, chiefly Muhammadans), the headquarters of a first-class military district, ranks as the most important frontier city of India. It is the residence of the Chief Commissioner of the N.W. Frontier Province (Sir H. N. Bolton, K.C.I.E., C.S.I.), and is both interesting and picturesque. It stands upon a ridge above the plain, stretching towards the mountains, on the left bank of the Bara stream, 15½ m. S.W. of the junction of the Swat and Kabul Rivers, and 10½ m. E. of Jamrud Fort, at the entrance of the

Khyber Pass. Kabul is 190 m. distant from here. The N.W. Frontier Province, which was constituted by Lord Curzon in 1901, includes the Districts of Hazara, Peshawar, Kohat, Bannu, and Dera Ismail Khan, and the Agencies of Dir, Swat, and Chitral, Khyber, Kurram, Tochi, and Wana.

Peshawar is the ancient capital of the Gandhara Province, in which the Mahayana Buddhists (p. lxxxii) arose. To the E. of the city are the mounds of Shahjiki-dheri, covering ruins of the largest Buddhist stupa in all India (285 ft. from side to side), in which a relic casket of King Kanishka, containing some of the ashes of Buddha, was discovered in 1909. This casket is now in the Peshawar Museum. The Pathans made their appearance about the 8th century, and the present tribes settled in the 15th century. Sabaktagin, Prince of Ghazni, conquered Raja Jaipal here in 978, and his more famous son Mahmud conquered this Prince again and his son Anandpol in 1001 and 1008, and Babar passed through it in 1519 A.D. The old name of Parashawar was changed by the Emperor Akbar, and till the reign of Aurangzeb the place was of great importance as commanding the route to the Mughal Province of Kabul. The houses of the city are built of small bricks or mud, held together by a wooden framework to protect them from earthquakes, and the streets are irregular and tortuous. The Edwardes, or Kabul, Gate leads to the main Kissa Kahani street. The *Ghor Khatri*, which stands high in the N.E. corner of the city, was successively a Buddhist monastery and Hindu temple, and is now the Tahsil. The C.M.S. has an important school in the city, and a pretty Mission Church; also a College in the Cantonment limits, a few paces to the N. of the Peshawar Cantonment

station. Outside the city, N., is the square Bala Hissar Fort, with earthen walls 92 ft. high. From it and from the Ghor Khatri there is a very good view of the Peshawar Valley and hills. At the Bajauri Gate is a fine building used as a Govt. Guest House. The cemeteries are very numerous, and quite surround the city.

The Islamia College was opened in 1915 to the W. of the Peshawar Cantonment at a distance of nearly 3 m. on the Peshawar-Jamrud road, just opposite the Burj Hari Singh Police Station: it is a very fine building. The Zenana Hospital, which is named after the late Duchess of Connaught, and maintained by the Peshawar Municipality, is inside the city, quite close to the Hasht-nagri Gate.

Peshawar has a great transit trade from Kabul and Bokhara and Central Asia. The Bazaars are well worth a visit, both for the objects they contain—many of them not seen in Central India—and for the fierce-looking and picturesquely-dressed tribesmen from Afghanistan and Central Asia.

The special manufacture of Peshawar is bright-coloured scarves, or *lungis*, worn as turbans. Waxcloth work and some ornamental needlework are also made here, as well as knives and small-arms; a special form of wood-carving flourishes.

The Cantonments, 2 m. W. of the city, and $3\frac{1}{2}$ m. long by $1\frac{1}{2}$ m. broad, are situated on a slope towards the Khyber Pass. In them are a *Public Garden*, Government House, and the Victoria Memorial building, now a museum with a very fine collection of Græco-Buddhist sculptures and other antiquities. Most of these were excavated at Shahr-i-Bahlol and Takht-i-Bahai by the late Dr D. B. Spooner, who also arranged them on scientific lines and published an illustrated *Hand-*

book to the Sculptures in the Peshawar Museum (Bombay, 1910; R.1). The relic-casket of King Kanishka will be shown to visitors on application to the Curator. The main roads are lined with trees, and in the spring, when the roses and fruit-trees are in bloom and the fresh winter snows stand up grandly to the N. and W., the place is extremely beautiful. The lines of the Indian troops are situated at the Eastern and Western extremities of the Cantonment, and the barracks of the British troops in the centre. The Roman Catholic and Anglican Churches lie towards the W. end of the Mall, and the Club is close to the latter. Near the railway station is the grave of a *naugaza* (nine-yard) saint. At the E. end of the Mall, is an obelisk to the memory of Colonel Mackeson, C.B., Commissioner of the Peshawar Division, who was murdered by an Afghan in 1853. Farther on, beyond the pretty cricket-ground are the old District Courts, partly accommodated in the old Residency, and surrounded by a garden; the buildings are now used as military offices and the Courts have been moved to a site near the jail.

On the outbreak of the Mutiny in May 1857 Brigadier-General Sydney Cotton was in command at Peshawar, Colonel (afterwards Sir Herbert) Edwardes being Commissioner, and John Nicholson Deputy-Commissioner. These decided that the formation of a Movable Column was necessary. Sir John Lawrence approved, and the Column was at once constituted. Under the command of Colonel (afterwards Field-Marshal Sir) Neville Chamberlain, then commanding the Punjab Frontier Force, and later, under General Nicholson, it was responsible for rendering harmless or destroying most of the dangerous mutinous elements still left in the Punjab. Besides the 24th, 27th and 51st Bengal Infantry and the

55th Light Cavalry, which were quartered in Peshawar Cantonment, there was a force elsewhere in the valley, amounting in all to nearly 10,000, against which, fortunately, could be set 2500 British at Peshawar and Naushahra. On the news of the half-hearted mutiny of the 55th Native Infantry at Naushahra on 21st May it was determined to disarm the four regiments in Peshawar, and this was quietly and effectively done at two separate parades on the 24th May, under the rifles of a British regiment supported by guns. The Naushahra men allowed themselves to be led to Mardan, where two companies had already taken the place of the Guides marching to Delhi; and on a flying column advancing from Peshawar, with John Nicholson as Political Officer, to disarm them, the whole regiment broke away in wild flight to the hills, many being captured or killed on the way, and most of the rest perishing in Swat and Buner.

There is capital *hunting* at Peshawar throughout the winter. The climate at this season is often very cold, and warm clothing is essential.

A visit may be paid to **Bara** (7 m., D.B.), from which place good water has now been brought to Peshawar in a conduit made of blocks of concrete. At intervals of $\frac{1}{2}$ m. there are small towers for ventilation. There is a mud fort at 6 m. S.W. of the Cantonment, close to the pass, from which the water comes. At Pusht-i-Khar, half-way between Peshawar and Bara, is an aqueduct bridge.

There are other forts at the mouths of passes into the hills—such as Michni, Shabkadar, and Abazai; but permission to visit them is necessary.

Abazai protects the headworks of the canal from the Swat River, which joins the Kabul River at Nisatha, 15 m. N.E. of Peshawar.

Persons accustomed to a hard day in the saddle will enjoy a ride of 37 m. from Peshawar through the Kohat Pass to Kohat (1767 ft.), (D.B.), 5 m. from the S. base of the Tirah Mountains. The crest of the pass is 2800 ft. high.

There is a R.H. at Aimal Chabutra, 20 m. from Peshawar. Fort Mackeson lies on the left of the road, N. of Aimal Chabutra.

THE KHYBER PASS AND RAILWAY.

The Khyber Pass.—No one should leave Peshawar without visiting the Khyber Pass, which has been the scene of so many historic incidents.

The Pass, of which the Sikhs and the Indian troops of the British Army stood in great dread, was forced early in April 1842 by General Sir George Pollock with an army of 8000 men, the heights being carefully crowned: and the retirement of the army in the following November was similarly protected. At the opening of the second Afghan War in November 1878, Ali Masjid was attacked by General Sir Sam Browne and was deserted by the enemy during the night. The Pass was held by the Khyber Rifles from 1890 to 1896, when it was taken over by the Khyber tribesmen. At present (1929) Landi Kotal is the hdqrs. of a brigade, and one British and two Indian infantry regiments are stationed there, as well as a mountain battery. At Jamrud, Ali Masjid, and Landi Khana, the garrison is composed in each case of an Indian infantry regiment.

The principal clans of the Khyber Afridis are the Zakka Khel, Kuki Khel, Malik Din, Kamrai, Kambar Khel, Sipah, and Aka Khel, numbering some 20,000 fighting men. The Adam Khel are not directly connected with the Pass. N. of the Kabul River are the Mohmands, and S. of Tirah the Orakzai, separated from the

Kohat district by the Samana Range.

The journey through the Pass can now be made by rail from Peshawar in both directions. Apart from the ordinary train service, tourist coaches with kitchen and servants' accommodation can be engaged on application to the Agent of the North-Western Railway at Lahore: and these are hauled right through the Pass without change of carriage at Peshawar, which can be reached in 50 hours from Bombay.

Rail motors are also run through the Pass on application to the Agent at Lahore or the Divisional Superintendent at Rawal Pindi. If variety of route is desired, the Railway Company will provide a four-seated motor-car with driver for the journey by road to Landi Kotal (32 m.) or Landi Khana (37 m.), leaving Peshawar in the morning. The return journey can be performed in the same manner, or the train or rail motor can be taken about midday from either of those places.

The first-class single fare by rail from Peshawar Cantonment to Landi Kotal is Rs. 3, and Rs. 3-8 to Landi Khana. For a rail motor each passenger is required to pay Rs. 5 in addition to the first-class railway fare. The charge for a four-seater motor-car with driver is Rs. 50 for the single journey from Peshawar Cantonment to Landi Kotal or Landi Khana, and Rs. 80 for the double journey.

Permits.—If the journey to Landi Khana is made by rail, no permit is necessary. If the road is used in either direction, enquiry should be made *in advance* of the Political Agent for the Khyber at Peshawar, as the regulations are modified from time to time. At present (1929) passengers by road may proceed without a permit as far as Michni Kandoo, which is situated between Landi Kotal and Landi Khana. Beyond Michni Kandoo the journey by road may

not be made without a permit, which can only be obtained by a personal application to the Political Agent.

As there are no refreshment rooms on the Khyber Railway, visitors by road as well as by rail should provide themselves with luncheon baskets at Peshawar Station.

The Journey by Road.—The first ten miles of road from Peshawar cross an uninteresting stony plain. The Pass actually begins about two miles beyond *Jamrud* (1670 ft.), which is 10½ m. from Peshawar. There are two roads through the Pass—one for motor-traffic: another for the caravans or *kafilas* of heavily-loaded camels, oxen and asses and the strings of wild-looking men, women and children who pass along it twice a week on their way to and from Peshawar. The Pass has been regarded as a great trade-route since the earliest times, and the traffic is still considerable. Tuesdays and Fridays are caravan days, and the escort is supplied by the Khassadars—a local tribal force which draws British pay and is under the control of the Political Agent of the Khyber but is officered by its own headmen and provides its own arms. The Khassadars not only protect the caravans and the railway line, but picket the neighbouring hills. These *kafilas* which are best seen in the autumn and spring, are sometimes five miles long, and furnish one of the most wonderful sights in India.

When springtime flushes the desert grass
The *Kafilas* wind through the Khyber
Pass,

Lean are the camels but fat the frails,
Light are the purses but heavy the bales,
As the snowbound trade of the north
comes down

To the market square of Peshawar town.¹

In addition to the traders, it is calculated that from a hundred to two hundred thousand tribesmen and their families make the double

journey every year. When the winter sets in, they come down to the plains of India to sell their labour, and return with the arrival of spring. There is no greater pageant to be seen than these annual migrations.

At *Jamrud* the narrow opening of the Pass comes in sight. The present fort was built by the Sikh General, *Sirdar Hari Singh Nalwa*, and held by him on behalf of *Maharaja Ranjit Singh*, the "Lion of the Punjab" until January 1837, when he was killed in action against Afghan troops sent by *Dost Muhammad*. His body was cremated at a spot on the Peshawar road which is still known as *Burj Hari Singh*. The fort with its wireless tower bears a curious resemblance to a modern battleship. The walls are more than ten feet thick and the gates are bastioned and duplicated. Accommodation is provided within for barracks, staff headquarters, and an ammunition depôt. Immediately outside is a high-walled caravanserai where the bi-weekly *kafilas* halt for the night when the Pass is closed to traffic.

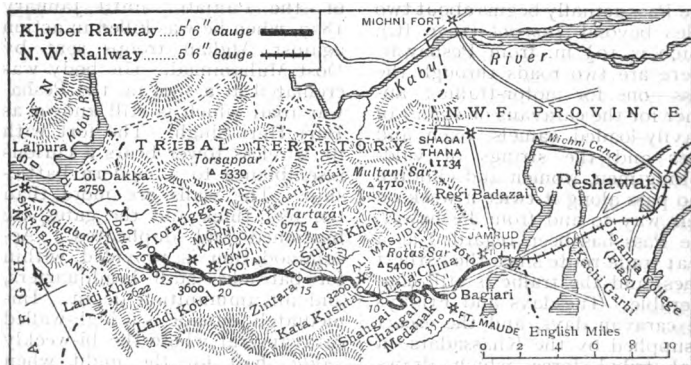
As the car proceeds along the winding road from *Jamrud*, *Fort Maude* can be seen ahead on a lofty peak. A small Muhammadan shrine is passed, with heads of markhor placed on the tomb, and the road ascends a ravine to the crest known as *Mackeson's Ridge* from the famous political officer of that name, whose murder by an Afghan fanatic in 1853 is commemorated by an obelisk on the Mall at Peshawar (p. 385).

The road then descends to the bed of the Khyber stream which enters the plains to the S. of *Jamrud*. At this point a fine view is had of the heights of *Tartarra* (6800 ft.) on the N. side of the Pass, and farther on, from the *Shahgai Ridge*, the cliffs and fort of *Ali Masjid* (2453 ft.) are visible. The Pass is exceedingly narrow and hemmed in by cliffs on either side,

¹ Kipling: *Ballade of the King's Jest*.

those on the Ali Masjid side being especially remarkable. The road continues along the left bank of the stream and above the Pass through the destitute valley of Lala Beg to *Landi Kotal* (3373 ft.). The "Shpola Stupa," which is about 2000 years old, is passed about 3 m. before reaching Landi Kotal. It stands boldly on a bare rock close to the road and the railway, and is raised on a rectangular plinth supported by a

the *Khout* strict, was carried out as long ob 1879: but it was not until 1891 that construction was decided upon. The line was opened to traffic in November 1925. It cost 27½ lakhs of rupees and ranks with the Darjeeling Railway and the Kalka-Simla Railway as one of the marvels of railway engineering in India. Its total length is 26½ m. from Jamrud which is the starting-point. The entire line is in tribal



massive retaining wall. Traces were found in it of an image of Buddha with attendants on either side.

From the *Pisgah Peak* (4500 ft.) to the N.W. of Landi Kotal a fine view can be obtained of the valley which runs down from Dakka, the Afghan frontier post, to Jalalabad, (91 m. from Peshawar), named after the Emperor (Jalal-ud-din) Akbar and renowned for its defence by General Sir Robert Sale from 12th November 1841, to 7th April 1842.

From Landi Kotal a steep descent of 2000 ft. leads past *Michni Kandoo* (where permits are examined) to *Landi Khana*, 2 m. from the Afghan border. It is absolutely forbidden to cross the frontier.

The Khyber Railway.—The reconnaissance for a railway through

territory outside British India. By means of loops and zigzags, over high bridges and through numerous tunnels, it rises to a height of about 3500 ft. at Landi Kotal. The ruling gradient is 1 in 33 for the ascent and 1 in 25 for the descent to Landi Khana, which is 2600 ft. above sea-level. There are 34 tunnels with an aggregate length of 3 m., and 92 bridges and culverts. The stations are built with loopholes like forts and defended by towers at the corners.

Bagiari, the first station after Jamrud, lies in the jaws of the Pass. A bridge carries the line over the valley in which the motor and caravan roads lie: and a long curve brings the train to the first reversing station at *Medanak*. The line next ascends a nullah to the mouth of the *Kafir Tangi* tunnel, upon emerging from which the

R



two roads are again seen across the valley, and also several of the forts which guard the Pass. The second reversing station is at *Changai*, which is visible on the skyline from *Bagiari*.

After *Changai* the railway climbs steadily in a wide loop round the head of a valley through a series of tunnels and meets the roads close to *Fort Maude*. Fine views of the Pass and of the plains towards *Peshawar* are obtained round this loop. Another long loop brings the train from *Fort Maude* to *Shahgai* station, which is over 1000 ft. higher than *Jamrud*. To the left are the mountains of *Tirah*. The hills begin to close in on leaving *Shahgai* as the *Ali Masjid* gorge is approached. Deep cuttings, high embankments and tunnels succeed one another. The second tunnel after *Shahgai* passes under a ridge on which are the huts of a military camp, and on emerging a brief glimpse is caught of *Ali Masjid* with a green shrine in the valley below and a fort on the hill above.

The train then plunges into a series of tunnels through a narrow limestone gorge, and finally emerges at *Kata Kusta*, above the *Khyber* nullah. Here the long climb begins up the *Khyber* valley, which is at first narrow and deep, but gradually widens out. Fields and villages of the *Zakka Khel* are

passed: each village enclosed by a high wall and protected by a watch-tower.

Zintara is the station immediately beyond *Landi Kotal*. The fort and camp at the latter place are on the farther side of the *Ghatzai Ridge*, which rises immediately above the station on the N. The line descends after leaving *Landi Kotal*. The caravanserai is passed on the right and a series of tunnels leads to the *Tora Tigga* reversing station. The terminus at *Landi Khana* is reached through deep cuttings and a final tunnel.

From this point the railway formation is complete to the *Afghan* frontier at *Tor Khan*, 2 m. away, but the trains do not proceed beyond *Landi Khana*.

ROUTE 18.

KASHMIR,¹ and some of the routes into that country.

General Description.—The *Valley of Kashmir* is an oval plain, some 84 m. in length and 20 m. to 25 m. in breadth, at an average height of about 6000 ft., and entirely surrounded by the lofty, snowy outer

¹ Selected List of Books on Kashmir.

- C. F. Tyndale Biscoe, *Kashmir in Light and Shade*. (Seeley, Service, 1922.)
 Hon. Mrs C. G. Bruce, *Kashmir*. (A. & C. Black, 1912.)
 Lt.-Col. Joshua Duke, *Kashmir and Jammu: A Guide for Visitors*. (2nd edn., Thacker, 1910.)
 Sir W. R. Lawrence, *The Valley of Kashmir*. (H. Frowde, 1895.)
 J. C. M'Donnell, *Hints on Hill Travelling in Kashmir*.
 Major A. Neve, *The Tourists' Guide to Kashmir, Ladakh, etc.* (Lahore, 1918.)
 A. Neve and G. F. Millais, *Picturesque Kashmir*. (Sands, 1900.)
 R. B. Pandit Man Mohan Lal, Langar, *A Handy Guide to Kashmir*. (Cawnpore, Revised 1921.)
 Sir F. Younghusband and E. Molyneux, *Kashmir* (Illustrated). (A. & C. Black, 1909.)
 Ernest Neve, *Beyond the Pir Panjal*.
 V. C. Scott O'Connor, *The Charm of Kashmir*. (Longmans.)
 Miss Pirie, *The Land of Streams and Solitudes*.
 Mrs Percy Brown, *Chenar Leaves: Poems of Kashmir*. (Longmans.)

ranges of the Karakoram and Himalaya. Up to the end of May, and sometimes by the beginning of October, there is a continuous ring of snowy peaks around the valley, the principal being—N. of the Wular Lake, Nanga Parbat, 26,620 ft.; E., Haramukh, 16,900 ft., and Amarnath, 17,320 ft.; S., the Panjal range, with peaks of 15,000 ft.; and W., Kazi Nag, 12,125 ft. These are all visible from the valley. Farther distant, but still in the territory of Kashmir, are many peaks of over 20,000 ft., the highest of which is probably Mount Godwin Austen, 28,278 ft. In the Chitral State, about 200 m. N.W. of Srinagar, is the peak Agram, 25,426 ft., in the Hindu Kush range.

The Valley of Kashmir is watered by the Jhelum and its tributaries, which find an outlet in the gorge at Baramula, and finally join the Chenab and Indus in the Panjab. The soil is fertile. Rice and maize are the chief crops; then come wheat, barley, and orchard or garden produce. The saffron (*Crocus sativus*) is famous for its yellow dye, and its cultivation is an ancient industry. The floating gardens of the Dal Lake are made of long strips of the lake reed, which are moored at the four corners by poles driven into the lake bed, heaps of weed and mud being then formed into small cones on the reeds. Melons, tomatoes, and cucumbers grow upon these cones with astonishing vigour. The *singhara*, or water chestnut, grows wild in the Wular and Dal lakes; the kernel, which is white and mealy, is either ground into flour or parched, and so eaten. All the fruits and vegetables of temperate climes grow well in the valley. The mulberry, bitter cherry, plum, apple, pear, grape, walnut, and pomegranate are indigenous; the apricot and peach have spread all over the valley since their introduction. The forest trees grow to a great

size. The principal among them are the deodar (the best, but not common), the blue pine, spruce, and silver fir, the elm, walnut, poplar, maple, willow, mulberry, horse-chestnut, and plane (or *chenar*), which is the special glory of the valley.

The climate is delightful in the early summer. In July and August, although the thermometer does not usually rise above 90°, the stillness of the air causes the heat to be oppressive in the valley, and then the mosquitoes make up for their comparatively mild sting by their enormous numbers. At this period visitors are glad to ascend to the upland plateaux—Gulmarg, Sonamarg (in the Sind Valley), Nagmarg, Pahalgam (at the head of the Liddar Valley), and Gurais. The pleasantest months in Srinagar, with a latitude of 34° 5' N., are April, May, June, October, and November. The spring months are showery, July and August are sometimes rainy, and the snows set in about Christmas time. The cold in winter is sometimes severe. In 1890-1 the thermometer fell below zero. In January and February 1893, and in 1915, there was skating all over the Dal Lake.

Sir Walter Lawrence wrote in 1895: "The valley contains nearly everything which should make life enjoyable. There is sport, varied and excellent, there is scenery for the artist and layman, mountains for the mountaineer, flowers for the botanist, a vast field for the geologist, and magnificent ruins for the archaeologist. The epicure will find dainty fruits and vegetables cheaper here than perhaps in any part of the world, while the lounge can pass delightful days of *dolce far niente* in the mat house-boats moored under the shady *chenar*-tree."

The population of the valley is 1,190,000, of whom 139,000 (Muhammadans, 109,000) inhabit the capital, Srinagar.

(See *Rules for Observance by Visitors in Kashmir*, Lahore, 1921.)

History.—For many centuries Kashmir was ruled by Scythian Hindu Princes, who were succeeded by Tatars. In 1586 the country was conquered by the great Mughal Akbar and annexed to his Indian Empire. Akbar built the fort on Hari Parbat Hill. His successor, Jahangir, made many expeditions to Kashmir, where he planted chenar-trees, and constructed lovely pleasure-gardens. In 1753 Kashmir passed into the hands of the Durani Chiefs from Kabul, and in 1819 Maharaja Ranjit Singh's general, Misr Chand, defeated the Pathan Governor, Jabbar Khan, and annexed the country. In 1846, on the close of the First Sikh War, Kashmir was assigned by treaty to Maharaja Gulab Singh of Jammu.

Antiquities.—The chief ruins of Kashmir are those at Patan, Parihasapura, Pandrethan, Payer, Avantipur, Martand, Harwan and Wangat. They exhibit traces of Greek influence, and are of great archaeological interest (see Fergusson's *Indian Architecture*, I, 251-272).

The Coins of Kashmir (now obsolete) are worthy of notice. (Consult *Coins of Kashmir* by Mr Rogers of Amritsar.)

Routes into Kashmir.

Motor facilities have changed the comparative importance of **Routes** into Kashmir. The following are described below:—

I. From Rawalpindi *viâ* Murree (p. 377) and Baramula.

II. From Gujrat (p. 372) *viâ* Bhimbar and Pir Panjal (see p. 397).

III. From Jhelum (p. 373) *viâ* Punch (see p. 398).

IV. From Hassan Abdal (p. 380) *viâ* Abbottabad (p. 381).

V. From Jammu (p. 370) by the Banihal Road (see p. 399).

The main motor routes are I, IV and V; II and III are not available for wheeled traffic. The most important is I, *viâ* Murree; but IV, *viâ* Abbottabad, though 35 m. longer, is more picturesque and has easier gradients.

(I) Murree Route to Kashmir.

Rawalpindi

By motor to

- 25½ m. **Tret** (D.B.)
- 36½ m. **Sunny Bank**
- 39½ m. **Murree** (Hotels)
- 64½ m. **Kohala** (D.B.)

Kashmir Boundary.

- 76 m. **Dulai** (D.B.)
- 85½ m. **Domel** (D.B.)
- 98½ m. **Garhi** (D.B.)
- 115 m. **Chenari** (D.B.)
- 133 m. 33 ch. **Uri** (D.B.)
- 147 m. 20 ch. **Rampur** (D.B.)
- 162 m. 21 ch. **Baramula** (D.B.)
- 197 m. 1 ch. **Srinagar** (D.B.)

The time for the journey by mail motor service from Rawalpindi to Srinagar is 27½ hrs. in summer. Halt at night at Uri. It is possible, however, to complete the journey in one day, provided an early start is made. Travelling by night is prohibited.

The road is well metalled all the way, though liable to interruptions from landslips in wet weather.

A Schedule of Rates for motor-cars, tongas, ekkas and bullock-carts is published by the Motamid Darbar, Kashmir State. Fare per seat, Rawalpindi to Srinagar, Rs.70; for whole motor (5-seater), Rs.225. Luggage by lorry at Rs.10 a maund. The more prominent motor Agencies are Messrs Radha Kishen & Sons and the Government Motor Mail Service. There are numerous other agencies with whom arrangements for transport can be made, and whose rates vary according to

season. Visitors should beware of uncredited firms.

The road ascends steadily from Barakao to (25 m.) Tret (4000 ft.) and to (36½ m.) Sunny Bank.

39½ m. Murree * (see p. 377) (7700 ft.), and then the road descends until the *Jhelum River* is reached at Kohala.

27½ m. from Sunny Bank is Kohala (2000 ft.). The road along the *Jhelum Valley* is hot in the summer months, so that travelling in the early morning or evening will be found the most agreeable. In addition to the very fine near scenery along this road, grand views of the snows may be obtained in April and May.

After crossing the river by a lattice-girder bridge, built in 1905, where toll is levied, the road ascends the left bank all the way to Baramula.

11½ m. on is Dulai, where there is a picturesque little D.B. From here the road is cut in the face of the cliff, and is liable to be blocked by landslips after rain.

9½ m. on to Domel (D.B. good), where the route from Abbottabad (Route IV. p. 399) joins in (left). Here the road turns E. at an acute angle, where the *Jhelum* is joined by the *Kishanganga*. About 1 m. N is seen the town of Muzaffarabad, with one or two temples, and beyond it is the Sikh fort. Customs post here, where baggage has to be declared and toll paid (Rs.5 for motor).

12½ m. to Garhi (D.B. good). Late in the afternoon this road is shaded by the high hills.

16 m. to Chenari (D.B.). The scenery is bolder and more beautiful.

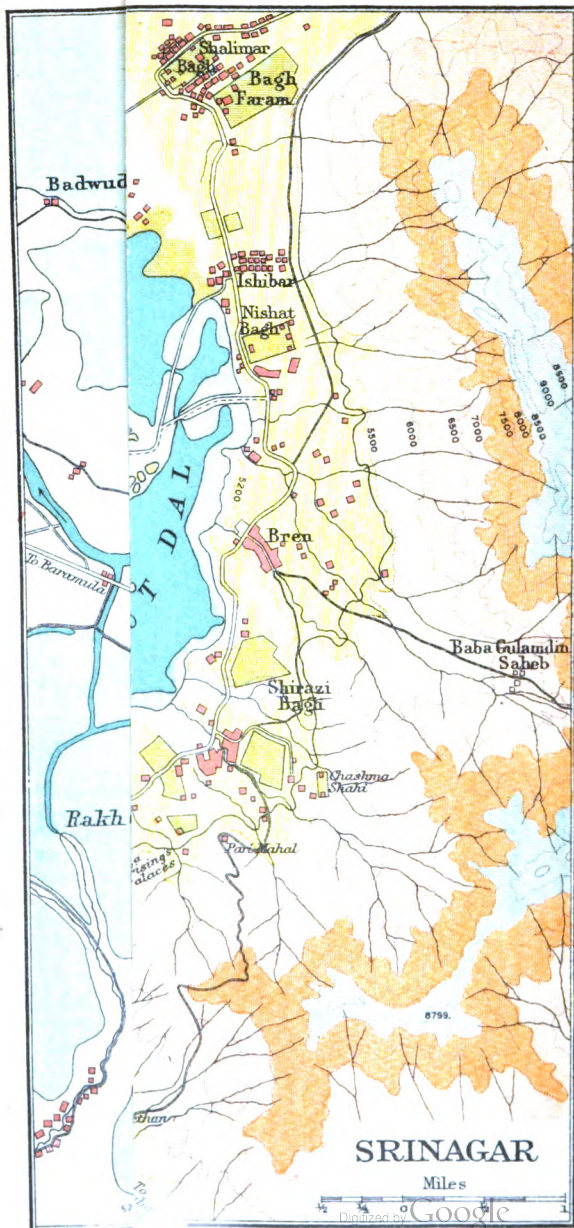
18 m. to Uri (D.B. good). The *Hajipir River*, which falls into the *Jhelum* from the S., is here crossed. For the sake of the gradient the road makes a long detour. The track to Punch *via* Hajipir Pass, 14½ m. to the pass, branches off at 7½ m. of the *Jhelum Valley Road*.

142½ m. from Rawalpindi, between Uri and Rampur, is the Water-power Station at Mahora which provides the electric power used in Kashmir.

13 m. to Rampur (D.B. good). From here the road is comparatively level. An ancient temple is passed at Buniar, standing in a cloistered enclosure, one of the most complete and interesting of all in Kashmir, and then the fort and village of Naushahra.

15 m. to Baramula (D.B. good). Here Kashmir *dungas*, or house-boats, can be procured for the life on the river; if it is desired to make the journey on to Srinagar by such a boat, it is best to arrange for one beforehand through the Agents. The construction of a barrage across the river and other obstructions have tended, however, within recent years to make the journey by water less popular. The larger *dungas* (with a crew of 5) may be hired for Rs.50 to Rs.65 a month; the smaller, generally used for kitchen and servants, cost Rs. 25 a month. English house-boats, with a cook-boat attached, cost Rs.75 to Rs.160 a month, according to accommodation, exclusive of the wages of the crew. Some of them have every comfort.

On leaving Baramula by boat Sopor is passed at the entrance to the Wular Lake. Fair mahsir fishing may be obtained here in August. Sopor is the starting-point for the Lolab Valley and Nagmarg. When the river is high



SRINAGAR

Miles

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boats go from Sopor to **Shadipore** by the Noor Canal. If the water is insufficient for the canal, the **Wular Lake** should be crossed early in the day, as dangerous storms sometimes arise later. The Wular Lake, extremely shallow, is the largest in India, being $12\frac{1}{2}$ m. long by 5 m. broad. From the Wular the boats join the river by a small canal, which leaves the river at Hajin. 5 m. N. of this is the Lanka Island, with the ruins of an old temple. 6 m. up stream from Hajin is **Sambal**. This is the starting-point for the trip by boat to the beautiful **Manasbal Lake**, with an old temple immersed in the water at the S.E. end of it. Shadipore is 4 m. up the river from Sambal, and Srinagar about 14 m. farther by the river. From Baramula to Srinagar by the Noor Canal takes little more than one day; by the Wular Lake, two to three days.

From Baramula the traveller can go by boat up the Pohru River to **Sunawin**, the next day to **Kulangam**, and the third day, if the river is full, to **Awatkoala** (very pretty scenery). Sending the boat back to Sopor, a pleasant march may be made through the **Lolab Valley** as follows: **Awatkoala** to **Koopwara** (8 m.); to **Lalpur** (12 m.), the capital of the Lolab Valley; to **Harwan** (9 m.); remains of an apsidal temple with a stupa and chapels; back to **Sopor** (10 m.); and then on to Srinagar, as above. The Lolab Valley is very pretty, and the marches easy. Formerly black bears were numerous, especially during the mulberry season, but they are now less common.

At 16 m. from Baramula is **Patan**, near which are ruins of two temples of the 9th century. A few miles farther on an unmetalled road branches off to Shadipur; about a mile along this are the recently excavated Buddhist re-

mains of **Parithasapura** (8th century A.D.), remarkable for the enormous size of the stones.

Srinagar * (erroneously derived from **Suryanagar**), lat. $34^{\circ} 5'$, long. $74^{\circ} 51'$, 5250 ft. above sea-level, is the capital of Kashmir State. It is beautifully situated in the centre of the "Happy Valley," has a population of 139,520, and is divided into two parts by the River **Jhelum**, along the banks of which it stretches for nearly 2 m. The river is crossed by quaint wooden bridges, but the uppermost, or **Amir Kadal**, has been rebuilt on modern lines. Parts of the embankment are of masonry, in which carved stones from demolished temples may frequently be noticed.

The city, traversed by canals, was built by the Raja **Pravarasen** in the 6th century, and consists chiefly of wooden houses, some of them several storeys high, surmounted by sloping roofs covered with earth. Within the **Sher Garhi**, formerly surrounded by massive walls containing the city fort, is the *summer residence* of the Maharaja. The **Jami Masjid**, near the Mar Nulla, is a spacious building, and in its present form dates from the 17th century. Quite recently it has been thoroughly restored. Its principal features are the massive enclosure-wall built of brick, and the forest of immense deodar pine pillars which form the interior. The Muhammadan buildings in Kashmir are mainly constructed of timber, and this mosque is the finest example. There is another wooden mosque in the city, the **Shah Hamadan**, which is most picturesquely situated on the river-bank. Not far from it, on the opposite (left) bank of the river, is the stone mosque built by Nurjahan, wife of the Emperor Jahangir, now a granary. It is recorded that

objection was taken by the local Muhammadans to its use as a mosque, because it was built by a woman! Below the fourth bridge is the tomb of the mother of King Zainu-l-abidin, consisting of the plinth of a 9th-century Hindu stone shrine, converted into a Muhammadan mausoleum by the addition of domes of brick.

A fine view of the city and its neighbourhood is obtained from the top of the **Takht-i-Sulaiman** ("Throne of Solomon"), 6263 ft.—i.e., 987 ft. above the city—where there is a fine stone temple, of which the greater part dates from the 8th century. The **Hari Parbat**, an isolated hill on the N. outskirts of the city and 250 ft. above it, should also be ascended. It is surrounded by an extensive wall, and surmounted by the **Fort**, built by Akbar at the end of the 16th century.

Many good subjects for the artist may be found in Srinagar, but the smells in the town are often very trying.

The chief industries are those of the carpet and silk factories, wood-carvers, embroidery-makers, gold, silver, and copper smiths, papier-mâché makers, leather workers, and dealers in precious stones.

The late Maharaja constructed a Zenana Hospital in the city in memory of the Diamond Jubilee of the late Queen-Empress.

The Residency and the European quarter lie above the city and the highest bridge on the river. In the centre of the quarter is a fine ground for cricket and polo, provided by the Maharaja; on the N. side of this are Nedou's Hotel and a golf course; and at the N.E. corner is the **Takht-i-Sulaiman**, with the entrance to the Dal Lake at its foot, not far from the C.M. Hospital. It is customary for visitors to sign their names in the Visitors' Book at the Residency.

List of Roads in Kashmir ordinarily available for motors (W. to E.).

1. Srinagar to Baramula and Domel (p. 392).
2. Baramula to Sopor (p. 392).
3. 4 m. W. of Srinagar on Baramula Rd. to Manasbal Lake (p. 393).
4. Srinagar *viâ* Anchar to Ganderbal and the Sind Valley (p. 397).
5. Srinagar *viâ* Gupkar, Nishatbagh, Shalimar Bagh to Harwan (p. 395).
6. Srinagar to Khanabal and Islamabad (Anantnag) (p. 395).
7. Islamabad to Achibal, and up Liddar Valley to Pahalgam (p. 396).
8. Khanabal *viâ* Qazigund and Banihal to Jammu (p. 399).
9. Qazigund to Verinag (p. 396).

EXCURSIONS FROM SRINAGAR.

(1) The first excursion should be to the **Dal Lake**, which is close to Srinagar, on the N.E., and is one of the most beautiful spots in the world. The lake is about 4 m. long and 2½ m. broad. Skirting the W. and N. sides of the **Takht-i-Sulaiman** from the Dal Gate, and passing through a stretch of floating gardens, the **Nishat Bagh** will be first reached on the E. side of the lake. The terraces in this, the flights of steps ascending them, and the water falling down them are extremely beautiful, and the first afford delightful glimpses of the lake. 2 m. farther on is the **Shalimar Bagh**, built by Jahangir, who lived there in the summer months with Nurjahan, "The Light of the Harem." They are fully described by Bernier. In crossing the lake to the W. side a fine view is obtained of the mountains behind these two gardens. Beyond a small island with chenar-trees lies the **Nasim Bagh**, a delightful fine, park-like expanse,

closely planted with magnificent chenar-trees. Well raised above the lake, it catches the breeze, whence its name is derived. On the way back to Srinagar is passed a village with a large mosque, called Hazrat Bal; farther on is a fine view of the picturesque Hari Parbat, from which the Nasim Bagh Canal leads to the Dal Gate. The name of Hazrat Bal is derived from a hair of the Prophet Muhammad, believed to be preserved in the mosque.

The Eastern shores of the lake may also be reached on foot. Starting from the Munshi Bagh, the road leads S. of the Takht-i-Sulaiman to the edge of the lake. To the left is a wine factory. A romantic building, high up the mountain-side farther on, is the Peri Mahal, containing numerous fountains and tanks, now dried up, which indicate that it was originally a water-palace. Beyond are vineyards, and then, higher up, the Chashma Shahi, a small formal garden of the usual Mughal plan. The Nishat Bagh is 2 m. farther, 5 m. in all from the Munshi Bagh, and Shalimar 2 m. beyond that.

(2) Starting again from the Dal Gate, below the C.M.S. Mission Hospital, and turning to the left, the Mar Nulla leads through the Northern side of the city to the W. of Hari Parbat and the Anchar Lake, across which a boat can proceed to Gandarbal, 14 m. from Srinagar. Beyond the Dilawar Khan Bagh the canal passes under a series of bridges and balconied houses, and affords some of the most picturesque, but often, also, the most malodorous, views in the whole city. Near the end of it is the Idgah. From outside the Dal sluice-gate the Tsont-i-Kul, or Apple Canal, leads past the Chenar-bagh (a great resort for house-boats) to the river opposite the Sher Garhi, presenting varied and beautiful views all the way. Both of these expeditions may be often repeated with increased pleasure.

(3) **The Temple of Pandrethan** (Puranadhisthana, the "old capital") lies about 3 m. E. of the Residency by road, but very much farther by boat, owing to the loops of the river above Srinagar, which form so singular a feature in the views from the Takht-i-Sulaiman. It is about 18 ft. square and 30 ft. high and appears to have been built in the centre of a small stone tank. The beauty of the temple lies in its proportions, in the excellent sculptures of the interior, and in the trefoil-headed arches and roof which form the chief characteristics of the Kashmir style, unknown elsewhere except in a few out-of-the-way places in the Punjab. The temple was built about 900 A.D. and dedicated to Siva. On the N. side of the tank are some broken remains, including a square pillar with figures on each side of it.

(4) **Islamabad, Martand, Verinag, and the Liddar Valley.** These places can be reached by the motor road up the valley from Srinagar, which forms part of the Banihal Route V into Kashmir from Jammu. At 17 m. is **Avantipur** (D.B.); at 31 m. is **Khanabal** (D.B.), where the Jammu road branches off; and at 33½ m. is **Islamabad** (alternative name, Anantnag). If the visitor proceeds by boat up the river, he passes at 8 m. **Pampur**, and 6 m. farther reaches **Kakapur**, the starting-place for the **Temple of Payer**. This tiny temple (only 8 ft. square) is in excellent preservation, and, being complete, gives a good idea of what the beauty and elegance of the larger temples must have been. It is constructed of eight stones only, and is dedicated to Siva. Its date is about the 9th century A.D. In the interior is a large stone *lingam*.

About 6 m. above Kakapur is **Avantipur**, once a famous city and the capital of King Avantivarman,

who reigned 855 to 883 A.D. Two of the temples built by him are still extant, a smaller and more ornate one of Vishnu-Avantisvami near the village of Avantipur, and a larger one of Siva-Avantisvara about $\frac{1}{2}$ m. along the road to Srinagar. Both temples have recently been excavated, and the former with its sculptured plinth, its handsome gateway and well-preserved peristyle, is now one of the most striking and interesting monuments in Kashmir. About 10 m. farther is *Bijbehara* (on the main road to Khanabal) where there is a good encamping-ground above the town and bridge; fair fishing may be obtained. From here it is 4 m. to Khanabal; and then 2 m. by road to *Islamabad*, the second town in Kashmir, and originally the capital of the valley. The springs in the town are exceedingly picturesque, and the Wazir Bagh, to the S. of it, is a pretty place to camp in. From Islamabad one can proceed by car as far as Pahalgam, the road passing within a mile of the **Ruins of Martand**, which are $5\frac{1}{2}$ m. N.E., and stand isolated on an elevated plateau above the valley. The temple, which is the largest in Kashmir—being 63 ft. long—is also the finest example of the ancient Kashmiri style of architecture, which is remarkable for its quasi-classical features—derived, no doubt, from the earlier Indo-Hellenistic art of Gandhara and the North-West. Its date is not certain, but there are good reasons for ascribing it to the reign of Lalitaditya. Originally it was probably built for the worship of the sun-god, a phase of Hinduism which prevailed in Kashmir and parts of the Punjab during that period (8th century A.D.). It was largely destroyed by Sikandar, and has since suffered much from neglect.

From Martand a rough road feasible for motors leads to

Achibal (7 m. from Islamabad), with its beautiful streams and cascades, groves of magnificent chenar-trees, and the old pleasure-garden of Jahangir. There is a bungalow for visitors and an excellent camping-ground.

From Achibal a path leads *via* *Shahabad* to (13 m.) *Verinag*, which is also accessible by car from the Banihal Road. Here are the celebrated springs, the source of the River Jhelum, which rises in an octagonal tank in a garden near the foot of the Banihal Pass (9763 ft.). One of the recesses of the enclosure round the tank bears an inscription by Jahangir. This spot was a favourite haunt of his empress Nurjahan. The tank is full of sacred fish.

2 m. E. of Martand, in the lowlands of the valley, on the Pahalgam Road, is *Bawan*, where there are celebrated chenars and tanks and excellent camping-grounds. From here it is $9\frac{1}{2}$ m. up the Liddar Valley to *Ishmaham*, where there is an old ziarat, from which a fine view is obtained. *Pahalgam* (Pailgam) (8500 ft.), a favourite summer resort, with good camping-ground under the pines, is 13 m. farther on.

From Pahalgam an expedition may be made farther up the valley to (7 m.) *Thanin*, or *Chandawari* (10,500 ft.), whence it is a stiff climb to (6 m.) *Shisha Nag* (13,000 ft.), a fine sheet of water covered with ice till the month of June. From Shisha Nag it is 11 m. to the *Amarnath Cave*. The cave is a famous resort of pilgrims. The expedition to the *Kolahai glacier* at the head of the valley is easy and common.

From Pahalgam another route leads N. through Aru and Liddarwat into the Sind Valley. This route also is not an easy one, and as it ascends over 14,000 ft., it is often under snow till July. The

usual descent into the Sind Valley is *viâ* Sekiwās to Kulan.

(5) Another beautiful expedition may be made from Srinagar up the Sind Valley. The first stage is either by boat or by road to (14 m.) *Gandarbal*, a small village at the mouth of the valley. *Gandarbal* is 9 m. by road from the Nasim Bagh, in the Dal Lake. From *Gandarbal* the stages up the valley are—to *Kangan* (11 m.), to *Gund* (13 m.), to *Gagangair* (7 m.), and *Sonamarg* (7 m. Telegraph Office; 6 m. camping-ground at Tajwaz). From *Kangan* a detour may be made N. to (8 m.) the temples of *Wangat*, or *Naghal*, placed in an exceedingly beautiful situation above the stream, and now the most picturesque of all the ruined temples of Kashmir. The route from *Gund* onwards is extremely beautiful, and the torrent pass, in which small snow glaciers will have to be crossed early in the season, leading up to *Sonamarg*, is extraordinarily fine. *Sonamarg* (8500 ft.) contains lovely meadows, and was once the chief sanatorium of Kashmir. The next stage, *Baltal* (9½ m. from camping-ground, 9282 ft.), is at the foot of the *Zojila Pass* (11,300 ft.), which leads to *Dras*, and thence to *Leh*, the capital of *Ladakh* (nineteen marches from *Srinagar*). From *Baltal* the *Cave of Amarnath* (p. 396) may be reached in the spring or early summer before the snow bridges have melted. Provisions are not easily obtained in the Sind Valley, and there are few bungalows.

(6) The ordinary route from *Srinagar* to *Gulmarg* * is by car to *Tangmarg*, 24 m., passing *Magam* (D.B.) at mile 14; and then by pony (fare 12 ans.) up the ascent, 4 m., to the *Gulmarg* plateau. There is also a pony track, 14 m. from *Baramula* direct to *Gulmarg*.

Gulmarg (or "Meadow of Roses") is a lovely, but somewhat rainy, spot at an elevation

of 8500 ft. Above it is the ridge of the *Firozpur Pass* and the *Apharwat Mountain*, 14,500 ft. The fine, snowy peak of *Nanga Parbat*, nearly 26,600 ft., is beautifully seen. *Gulmarg* offers the attractions of golf, tennis, polo, cricket, and other amusements.

(II) *Pir Panjal Route to Kashmir.*

Riding or on foot.	Gujrat to
28 m. <i>Bhimbar</i> (D.B.)	
39 m. <i>Saidabad</i> (D.B.), crossing Aditak Range.	
49 m. <i>Naushahra</i> (D.B.)	
60 m. <i>Chengas Sarai</i> (D.B.)	
73 m. <i>Rajaori</i> (D.B.)	
86 m. <i>Thana Mandi</i> (D.B.)	} Crossing Rattan Pir.
96½ m. <i>Baramgalla</i> (D.B.)	
111 m. <i>Poshiana</i>	} Crossing Pir Panjal.
122 m. <i>Aliabad Sarai</i> .	
140½ m. <i>Shupiyan</i> (D.B.)	
166½ m. <i>Srinagar</i> .	

This is one of the finest routes into Kashmir, but is practicable only for riding or walking, as it is impossible to drive.

Gujrat (p. 371).

28 m. *Bhimbar* (D.B.), a considerable town, situated near the right bank of the stream of that name, and surrounded by wooded hills. The road, which is fairly easy for 20 m., crosses over the *Aditak* range (2000 ft.) to

11 m. *Saidabad* (D.B.), where the *Samani Sarai* is worth a visit. The road then crosses the *Kaman Goshi* range (3000 ft.), from the top of which the snows first come in sight.

10 m. *Naushahra* (D.B.), and camping-ground on the *Tawi River*, in which there is mahsir fishing.

11 m. *Chengas Sarai* (D.B.). The shorter road ford the *Tawi* twice on the way. The D.B. is built on the right bank, about 200 ft. above the river, on an old Mughal sarai

Here is a very fine view of the snows.

13 m. **Rajaori** (D.B.) (3200 ft.), a day's march, to the E., of which there are two hot sulphurous springs. The D.B. is in an old pleasure-garden on the left bank of the river, overlooking on the right the picturesque town.

13 m. **Thana Mandi** (D.B.), along the *Tawi*, which becomes very narrow, the valley also contracting considerably. It is situated at the foot of the *Rattan Pir* Pass, with a good road running through it from Punch to Jammu.

10½ m. **Baramgalla** (D.B.), crossing the *Rattan Pir* (8200 ft.), easy ascent, very fine scenery. From this point ponies cannot be taken early in the year.

14½ m. **Poshiana**. From Baramgalla the road passes along a deep valley, crossing the *Sooran* torrent several times by log bridges, and ending with a steep climb. Poshiana (8200 ft.) is covered with snow till the end of May, and consists of a few shepherds' huts, which are flat-roofed. Tents may be pitched on the roofs, or the huts may be occupied, but they are roughly made and draughty.

11 m. **Aliabad Sarai**.

The road, very rough, now runs up the *Nilana Valley* to the summit of the *Pir Panjal* (11,400 ft.), from which there is a magnificent view of the Wardwan and Astor range. There are huts of refuge on either side of the Pir in case of storms. The sarai is not habitable until May owing to the snow.

18½ m. **Shupiyan** (D.B.), in the Kashmir Valley, a pleasant, easy walk, passing *Hirpur* (R.H.) on the way. There is a camping-ground here, and supplies are procurable for the first time since leaving Baramgalla. Hence it is a couple of easy marches (Ramu, 10 m.) to Srinagar. Or the route through

Mohanpoora to *Khanabal* (D.B.) for Islamabad (19 m.) may be followed and a boat be taken (p. 348) down the Jhelum River to Srinagar, about 14 hrs. From Shupiyan, 9 m. distant by Sedau, may be visited the *Haribal Falls* (40 ft. high) of the *Veshau River*. From Sedau it is two marches (12 m.) to the *Konsa Nag* mountain lake.

(III) *Jhelum and Punch Route to Kashmir.*

Jhelum to

13 m. Shikarpur	89 m. Sehra .
(D.B.)	105 m. Punch
26 m. Tangrot	(D.B.)
(D.B.)	115 m. Kahuta
<i>Kashmir Boundary.</i>	(D.B.)
36 m. Chaumukh .	
46 m. Raidani .	130 m. Hyder-
58 m. Neki .	abad (D.B.)
66 m. Berarli .	140 m. Uri .
74 m. Kotli .	

This route is long, the marches are somewhat difficult, and supplies scarce. Owing to the steepness of the road in places the traveller is recommended to take coolies rather than ponies.

Jhelum (p. 373).

13 m. **Shikarpur** (D.B.) The road is unmetalled, but in good order and level the whole way.

13 m. **Tangrot** (D.B.). The road lies, for the most part, in the bed of the Jhelum, so can only be used when the river is low. The fishing here is probably the best in India.

10 m. **Chaumukh**, crossing the Punch by a ferry. The ascent is by a very rough path (only walking being possible) to the village of

10 m. **Raidani**, prettily situated in a valley. Thence by the worst march in the route to

12 m. **Neki**, which is the residence of a few cowherds. No supplies obtainable.

8 m. **Bararli**, a small village, where there is good spring water, and supplies and coolies plentiful.

8 m. **Kotli**, on the left bank of the Punch. The camping-ground is through the town, under some trees, among a lot of streams working twenty flour mills. Supplies, coolies, ponies, etc., abundant.

15 m. **Sehra**, where black partridges abound. The scenery here is very pretty.

16 m. **Punch** (D.B.), a largish town, on the right bank of the Sooran, the conspicuous features of which are the *Raja Buldeo Singh's Palace* and the *Fort*. Punch may also be reached *via* Sooran, 16 m. from Thana Mandi (p. 398).

10 m. **Kahuta** (D.B.), a cluster of huts up the Bitarh Valley, commanding a magnificent view of the surrounding mountains.

8 m. to **Aliabad**, where there is a comfortable R.H.; some supplies are obtainable.

6 m. **Hyderabad** (D.B.), a small mountain village beyond the Haji Pir Pass (8500 ft.), where supplies are very scarce.

9½ m. **Uri**, thence (see p. 392) to Baramula and Srinagar.

(IV) *Hassan Abdal and Abbottabad Route to Kashmir.*

Stages from Hasan Abdal.

12 m. **Dedur** (D.B.).

8 m. **Haripur** (D.B.).

22 m. **Abbottabad** (Hotels).

16 m. **Mansehra** (D.B.).

19 m. **Garhi Habibulla** (D.B.).

2½ m. **Kashmir Boundary** at Ramkot Customs Post.

11½ m. **Domel** (D.B.).

(For continuation *via* Uri, see p. 392.)

The road is good, except in wet weather, as the river Haru is unbridged, and there is the possibility of landslips between Garhi Habibulla and Domel. The river Haru may be avoided by taking the train from Taxila Jn. (D.B.) on the N.W. Ry. to Havelian, 10 m. from Abbottabad.

Hassan Abdal (D.B.) (p. 380).

12 m. **Dedur** (R.H.), a roadside sarai and camping-ground.

20 m. **Haripur** (D.B.), a large and flourishing Indian town, lying in a richly-cultivated valley.

42 m. **Abbottabad** (Hotels) (p. 339).

58 m. **Mansehra** (D.B.). One of the Rock Edicts of Asoka was found here.

76 m. **Garhi Habibulla** (D.B.).

88 m. **Domel** (D.B.), see p. 392.

(V) *Jammu* (p. 370) to *Srinagar*.

This road, generally called the Banihal Route, has been improved for motor traffic: but in the winter and spring it is blocked by snow on the high passes. It is 206 m. long; and crosses the Chenab near Ramband and the Banihal Pass (9000 ft.) above Verinag (p. 396).

Stages	Accommodation
— Jammu . .	D.B. Khansama
21 m. Jhaggar . .	D.B.
7 m. Tikri . .	D.B.
14 m. Udhampur . .	D.B. Khansama
24 m. Kud . .	D.B.
13 m. Batote . .	D.B. Khansama
10 m. Pirah . .	D.B.
8 m. Ramban . .	D.B. Khansama
16 m. Ramsu . .	D.B.
10 m. Banihal . .	D.B. Khansama
30 m. Upper Munda . .	D.B.
10½ m. Qazigund . .	D.B.
11½ m. Khanabal . .	D.B. Khansama
14 m. Avantipur . .	D.B.
17 m. Srinagar . .	Hotel

ROUTE 19.

SIND AND BALUCHISTAN

(a) **LAHORE** to **KARACHI** by **Montgomery** (for **Harappa**), **Multan**, **Sher Shah Junction**, **Bahawalpur**, **Samasata**, **Rohri**, **Khairpur**, **Hyderabad (Sind)**, **Kotri** and **Jangshahi** (for **Tatta**); and from **Rohri** by the right bank of the **Indus** to **Sukkur**, **Ruk Junction**, **Larkana**, **Dogri** (for **Mohenjo-daro**), **Sehwan**, and **Kotri**.

(b) **RUJ JUNCTION** to **CHAMAN**, on the frontier of **Afghanistan**, by **Shikarpur**, **Jacobabad**, **Sibi Junction**, and **QUETTA**, returning to **Sibi** by the **Harnai** route.

(a) Lahore to Karachi.

The journey Lahore to Karachi Cantonment (753 m.) occupies 25 hrs.

4 m. **Lahore Cantonment**, W., second station of this Cantonment.

25 m. **Raiwind junction station** (R.) for 33 m. **Ferozepore**, and 87 m., **Bhatinda** (Route 15).

104 m. **Montgomery station** (R., D.B.) (pop. 14,840). Motors and tongas available. This place, created under British rule, is, since 1865, the hdqrs. of a District formerly known as **Gugaira**, and received its present name from Sir Robert Montgomery, Lieutenant-Governor of the Punjab (1859-65). From this point may be reached **Pak Pattan**, 30 m. S., near the **Sutlej River**, an extremely ancient place, first known in history as **Ajudhan**, and identified by General Cunningham with one of the

towns belonging to the **Sudrakoe** or **Oxudrakoe** of Alexander's historians. Motors and tongas ply on a metalled road between **Montgomery** and **Pak Pattan**. Originally a seat of a Hindu shrine, it was converted later into a place of Muhammadan worship by **Farid-ud-din**, of the famous **Chishti** family (p. 222).¹ A great pilgrimage takes place here at the *Muharram*. **Pak Pattan** is a stn. on the **Sutlej Valley** line which runs between **Kasur** (p. 354) and **Lodhran** (p. 403). About 10 m. E. are the **Suleimanke headworks** (opened March 1926) of the **Sutlej Valley Irrigation Project** (p. 354).

15 m. from **Montgomery station** (motors available) is **Harappa**, one of the oldest cities in India, situated on the former bed of the river **Ravi** (116 m. S.W. of Lahore). **Harappa Road**, the next station on the line, is 4 m. distant; but mail trains do not stop there, conveyances are not available, and there is no D.B.

The mounds which cover the site of **Harappa** have a height of some 60 ft. above the plains and a present circuit of nearly 3 m., but much of the ancient city probably lies buried beneath the surrounding alluvium. Their exploration was begun by the **Archæological Department** in 1920-21 and is still in progress. Owing to prolonged quarrying for bricks on the part of contractors and others, the site has been much damaged in the past and most of the buildings recently exposed are in a very fragmentary condition. The only large structure of which the plan is even fairly complete is one consisting of a double series of narrow parallel halls with a broad aisle running down the centre. The halls are about 52 ft. in length, and it is probable that they were either state magazines.

¹ A full account of this saint is in Mr Miles Irving's paper in the *Journal of the Panjab Historical Society*, i. 70-76.

or store-rooms. At the time they were built, there was no such thing as coinage; taxes were paid in kind and trade was done by barter. Extensive store-rooms for the use of the State or of merchants would, therefore, be indispensable. Like those of Mohenjo-daro in Sind (p. 413), the remains of Harappa extend over a long period of time and belong to several successive cities built one on the ruins of another. Those that have been excavated up to date, appertain to the chalcolithic age of the 3rd or 4th millennia B.C., when side by side with copper and bronze, stone was still being used for implements and weapons. They thus bring the Punjab and Sind within the orbit of the wide-flung chalcolithic culture whose ramifications are to be found as far west as the shores of the Adriatic and as far East as Japan. All the buildings brought to light on this site are constructed of well-burnt bricks of convenient size for bonding; the bonding material is usually mud, but occasionally gypsum. So far as can be judged from the remains unearthed, the dwelling-houses and streets of Harappa closely resemble those of Mohenjo-daro, and the social customs, religion and daily life in the two cities were generally similar. Among the small antiquities found at Harappa which are to be seen in the local **Museum** are numerous seals of soap-stone, faience, shell, etc., engraved with legends in a pictographic script that has not yet been deciphered, and with devices which generally take the form of real or fabulous animals. The copper objects include many interesting weapons and implements, such as double axes, daggers, lance-heads, mace-heads, celts and chisels, as well as a model of a two-wheeled cart with gabled roof and driver seated in front, which is probably the oldest example of a wheeled vehicle yet discovered. Other objects de-

serving special notice are a pair of faience bangles with cogged edge and numerous rings of stone, terra-cotta, and other materials—some plain, others undulating—which appear to have been objects of cult worship.

The site of Harappa was partially reoccupied during the early centuries of the Christian era, but the only remains of a later date are a *Naugaza* grave (27 ft. long) of a Muhammadan saint and a ruined mosque.

178 m. **Khanewal junction.** The lines serving the Chenab-Jhelum Canal Colonies, *viâ* Lyallpur and Shorkot Rd., join the main line (Lahore to Karachi) here. The main line continues to Karachi by the direct chord, *viz.*, Khanewal to Lodhran, which saves 26 m. Multan is on the loop line,

207 m. **Multan city and**

209 m. **Multan Cantonment (R., D.B.)* station.**

Multan city (D.B. in Cantonment, 1 m. from Cantonment stn.) is a municipal town, with a population of 84,806, of whom the majority are Muhammadans; lat. $30^{\circ} 12'$, long. $71^{\circ} 31'$. It is still poorly furnished with metalled roads, but they are good within municipal boundaries. It is the headquarters of a Division and District of the same name, and is 4 m. from the left bank of the Chenab and not far from the old bed of the Ravi. It is a place of great antiquity, and supposed to be the capital of the Malli mentioned in Alexander's time.

The first mention of Multan by name is by Hiuen Tsang in 641 A.D. Istakhri, who wrote in 950 A.D., describes the temple of the idol of Multan as a strong edifice between the bazars of ivory dealers and the shops of the coppersmiths. The idol was of a human shape, with eyes of jewels and the head covered with a crown of gold.

Shortly after Multan was taken by the Karmatian Chief, Jelem, son of Shiban, who killed the priests and broke the idol in pieces. It was restored in 1138. In 1666 A.D. Thevenot describes the temple of the Sun God as still standing, and the idol as clothed in red leather and having two pearls for eyes. This idol was destroyed by the orders of Aurangzeb.

Muhammad - bin - Kasim conquered Multan for the Khalifs, and it was afterwards taken by Mahmud of Ghazni in 1005, and by Timur in October 1398. Subsequently it formed part of the Mughal Empire, and then of the Durani kingdom. In 1779 Muzaffar Khan, a Sadozai Afghan, made himself ruler, but was killed with his five sons when Ranjit Singh stormed the place in 1818. In 1829 Sawan Mall was appointed governor. He was shot in 1844, and was succeeded by his son Mulraj. Upon his resignation after the First Sikh War, Mr Vans-Agnew and Lieutenant Anderson, who were sent down to receive the surrender of his office, were attacked in the fort and subsequently murdered at the Idgah on 20th April 1848, whereupon Mulraj went into rebellion. His forces were twice defeated by Major Herbert Edwardes, and he was shut up in the fort; but owing to the delay with which the British authorities took action, the Sikh forces before the place, under the command of Maharaja Sher Singh, also went into rebellion, and this led to the Second Sikh War. On the 2nd of January 1849 the city was stormed by the army under General Whish, and the fort was surrendered by Mulraj. Since that date the whole District has been under English rule. At the time of the Mutiny in 1857 the garrison consisted of the 62nd and 69th Bengal Infantry, the 1st Irregular Cavalry, and a Mounted Battery. On the arrival of a reinforcement of Punjab and Bombay troops, the Bengal sepoys were skilfully dis-

armed on the 10th June by Major (afterwards Sir) Crawford Chamberlain; but on the 31st August they rose and six English officers were killed. The surprise did not last long, and the whole of the mutineers were exterminated. The importance of Multan as the connecting link with Sind, from which the first outside assistance against the mutineers was received in the Punjab, was at the time almost supreme.

The heat of Multan is notorious, and the rainfall, varying in the District, is at headquarters little above 7 in. The saying is—

Dust, heat, beggars, and cemeteries
Are the four specialities of Multan.

The *Cantonment*, to the W. of the town, was extended to the S.W. and strengthened in 1888. The lines of the Indian Cavalry (now vacant) lie on the S. side of the Cantonment close to the railway: W. of them is the Defensible Post with the Heavy Battery lines (also vacant). The garrison, which is made up of a British infantry battalion and two Indian infantry regiments, is located on the N. side of the Cantonment. In the same direction are the *Hospital* and D.B., with the Roman Catholic cemetery to the N.W., and the Muhammadan cemetery, the Parsi cemetery, and the English church in succession to the N.

The old Fort rises near the N. of the city. The entrance is by the De (Dewal = temple) Gate, so called because it leads to the famous temple of the Narsingh (Lion Man) form of Siva or Prah-ladpuri. The original temple stood in the middle of the fort, and was destroyed by Aurangzeb; while the mosque built upon its site was totally blown up in the siege of 1848. Inside the enclosure, on the left, is the modern small temple, and, farther on, the Shrine of Rukn - ud - din, grandson of Bhawal Hakk, commonly

known as Rukn-i-'Alam ("Pillar of the World"). This is an octagon of red brick, bonded with beams of Sisu wood, and supported by sloping towers at the angles. Over this is a smaller octagon, leaving a narrow passage all round for the muezzin to call the faithful to prayers. Above this is a hemispherical dome. The total height is 100 ft., but as the tomb stands on high ground it is visible for 30 m. round. One of the towers was thrown down when the powder magazine blew up in the siege of 1848, and was rebuilt in faithful imitation of the old one, including the timber bonds. The whole outside is ornamented with glazed tile patterns and string courses and battlements. The colours used are dark blue, azure, and white, which, contrasted with the deep red of the finely-polished bricks, give a most pleasing effect. The mosaics are not like those of later days, mere plain surfaces, but the patterns are raised from half an inch to two inches above the background. The tomb was built by the Emperor Tughlak Shah (1340-1350) for himself, but given by his son Muhammad Tughlak as a mausoleum for Rukn-ud-din.

Farther on, to the right, is an obelisk about 50 ft. high, erected in memory of Vans-Agnew and Anderson. On a white tablet on the W. face of the pedestal is an inscription which concludes with the words:—

The annexation of the Panjab to the Empire
Was the result of the War,
Of which their assassination
Was the commencement.

About $\frac{1}{2}$ m. to the N.W. of the fort is the Idgah in which the murder took place. It has been restored to the Muhammadans as a place of worship.

The Tomb of Baha-ud-din Zakariya ("The Ornament of the

Faith"), commonly called Baha-ul-Hakk, or Bhawal Hakk, is as old as the reign of the Emperor Balban (1264-86), of which period there are few other architectural specimens. It was almost completely ruined during the siege of 1848. It was afterwards repaired and plastered over, but some glazed tiles remain outside. The lower part is a square; above this is an octagon half the height of the square, and above that a hemispherical dome. The son of Bhawal Hakk, whose name was Sadr-ud-din, is buried in the same tomb. His cenotaph is adorned with green tiles. Opposite, in the corner of the vestibule, is the tomb of Nawab Muzaffar Khan.

The Tomb of Shams-i-Tabriz, a celebrated Sufi martyr, murdered in 1247, stands $\frac{1}{2}$ m. to the E. of the fort on the high bank of the old bed of the Ravi. The main body of the tomb is a square surrounded by a veranda, with seven openings in each side. Above is an octagon, surmounted by a hemispherical dome, covered with glazed sky-blue tiles. The whole height is 62 ft. To the left of the entrance is a small square building, dignified as the Imambara.

219 m. Sher Shah junction station (D.B.), whence the Sind-Sagar Railway (p. 372) branches off W. and N., and crosses the Chenab, about 1 m. broad, on a splendid bridge of seventeen 200-ft. girders.

234 m. from Lahore *via* Chord line is Lodhran junction. The Sutlej Valley line from Kasur to Lodhran *via* Pak Pattan (p. 400) was dismantled during the War, in 1917; but has been since relaid.

242 m. the Adamwahan Bridge, 4224 ft. long, carries the N.W. Railway across the Sutlej River at a height of 28 ft. above the stream.

244 m. Bahawalpur (D.B.), is the chief town, and the capital of an Indian State under the political direction of the Agent to the Governor-General, Punjab States. The area of the State is about 15,000 sq. m., with a river frontage of 300 m. and a population of 781,191, of whom over four-fifths are Muhammadan; the annual revenue is nearly 50½ lakhs. The present Nawab, Capt. H.H. Sir Sadiq Muhammad Khan Abbasi, K.C.V.O., was born in 1904 and succeeded in 1907. His Highness, who was invested with full powers in 1924, is by race a Daudputra, and ranks on the list of Punjab Rulers next after the Maharaja of Patiala. His ancestors came from Sind, and assumed independence after the first expulsion of Shah Shuja from Kabul. In 1842 Sir Charles Napier restored to Bhawal Khan, the then Nawab, the Districts of Sabzalkot and Bhaung Bara, lost to the State in 1807. In 1847-8 the Nawab assisted Sir Herbert Edwardes during the Multan rebellion, for which he was rewarded with a life-pension of a lakh of rupees. His son, Saadat Khan, was expelled by his elder brother, and died a refugee in British territory in 1862. In 1863 and 1865 rebellions broke out, but were crushed by the ninth Nawab, who died soon after.

The Indian State Forces maintained include a fine Camel Corps, and number 560 Mounted Rifles, 337 Infantry and 460 camels.

The *Palace of the Nawab*, which is to the E. of the town, cost about £30,000. It is a square pile, with towers at each corner. In the centre is a hall for holding receptions. There is a fountain in front. At the side are underground rooms, where the thermometer remains at 70°, while it rises from 100° to 110° in the upper rooms. An extensive view E. can be obtained from the roof towards the vast *Desert of Bikaner*, which stretches for 100 m.

251 m. Samasata, junction for Bhatinda (p. 351) and thence for Ambala, Delhi, Rewari, and Bikaner. By the canals flowing from the headworks at Islam (near Bakshan Khan stn. on this line) and Suleimanke (p. 400) water is supplied to the desert tracts of the Bahawalpur State.

Following the course of the Indus, through an uninteresting tract, the railway reaches

390 m. Reti station (R. and railway R.H.). A rest-camp for troops between Karachi and Lahore has been established here. 4 m. S. of Reti are the vast ruins of *Vijnat*, a leading city before the Muhammadan conquest: there is nothing to be seen but a surface raised by the debris.

460 m. Rohri station (District Bungalow for the use of Government Officers), a municipal town (pop. 9520), and the capital of a sub-District of the same name, which has an area of 4258 sq. m. It is on the left, or E. bank of the Indus, on a rocky eminence of limestone, interspersed with flints, and seen from a distance has a striking appearance, the houses being two and three storeys high, with flat roofs surrounded by balustrades. It is said to have been founded by Saiyad Rukn-ud-din Shah in 1297 A.D., which was more than 300 years after the Indus deserted its former bed at Alor and came to Rohri. The rocky site of Rohri ends on the W. side in a precipice 40 ft. high, rising from the river-bank. In the latter part of the rains the water rises 16 ft. above its lowest level.

The *Jami Masjid* is a fine building, now whitewashed, with three domes, and decorated with glazed porcelain tiles. A Persian inscription records that it was built by Fateh Khan, an officer of the Emperor Akbar, about the year 1572 A.D. One of the sights of the

place is the *Mui Mubarak*, or "a hair of the Prophet," in amber, and preserved in a gold tube adorned with rubies. The War Mubarak (War, in Sindi=*mui*, Persian for hair), a building 25 ft. sq. on the N. of the town, is said to have been erected about 1545 by Mir Muhammad for the reception of this relic. It appears it was brought from Constantinople by one Abdul Baki, whose descendants have still the keeping of it. The present building, with its striking green dome and painted walls, was built a few years ago by the Pir of Kingri. The *'Idgah* was erected in 1593 A.D. by Mir Muhammad M'asum. Near Rohri are forests, covering 58,000 acres, or about 90 sq. m., which were planted in 1820 by the Talpur Amirs, and are now under the control of the Sind Forest Department. There are forests, of considerable depth, on both sides of a long stretch of the Indus.

A mouth of the **E. Nara Canal** is crossed 2 m. before reaching Rohri, and from Rohri runs due S. through Khairpur, and enters the Thar and Parkar District.

$\frac{1}{4}$ m. from Rohri, at the mouth of the E. Nara Canal, 156 ft. wide, are the powerful sluice-gates which regulate the supply of water from the Indus. When these gates are closed during inundations it is a wonderful sight to see the fish trying to pass them. Millions collect on these occasions, and in attempting to leap the falls fall back upon common Indian cots, made of rope, which are suspended from the arches of the regulator. The fishing is let out by yearly contract, and yields a handsome revenue.

Excursion to Arore (Aror).—While at Rohri a visit may be paid to Arore (pop. 815)—formerly the very ancient Alor¹—which is

¹ Alor, Uch, and Hyderabad are believed to have been the sites of three of many Alexandrias founded in the Punjab.

only 5 m. distant to the E. Alor was visited about 640 A.D. by the Chinese pilgrim Hiuen Tsang, who gave the picture of a Sind stretching from Kashmir to the sea with a capital at Alor under a Sudra monarch. Thereafter a Brahmin, Chach, usurped the throne; and in 711 A.D. his son and successor, Dahir, was defeated by the invading hosts of the Caliph under Muhammad-bin-Kasim. At that time the Indus washed the walls of the city, but was diverted into its present channel by an earthquake in 962 A.D.

Once the road from Rohri passed over a bridge about 600 ft. long, across the ancient channel of the Indus, but this is now no longer the case: only a few stones show where the bridge once stood. The modern metalled road from Rohri does not pass through the village of Arore, which is on an elevation, but skirts its base. On the farther side is a village, and from this an extensive ridge of ruins runs in a N.E. direction. That which bears the name of 'Alamgir's Mosque is picturesque. Two of them are shrines, one to Shakarganj Shah, where there is still an annual fair, and the other to Kutb-ud-din Shah. To the former tomb people of the neighbouring villages still make pilgrimages. It has no dome or building over it, but is a plain, white, neat tombstone, with a border of carved flowers.

From Rohri a loop-line crosses the Indus to Ruk Junction (p. 412) and proceeds down the right bank and the direct line to Karachi runs down the left bank of the Indus to

475 m. **Khairpur** (pop. 15,740), founded 1783, the seat of the last Amirs of Sind, the Talpurs, and the capital of the State of that name (area, 6050 sq. m., pop. 193,152, annual revenue 23 lakhs). The present Mir, H.H. Ali Nawaz Khan Talpur, was born in 1884 and succeeded in 1921.

645 m. **Hyderabad** (Haidarabad) (D.B.), has a population of 81,837 inhabitants. It is situated on an island-hill 2 m. N. of the Ganja hills, from which it is separated by an old course of the Indus. This river now flows to the W. of the hill. On the E. is the Fuleli Canal, which used to leave the main stream 12 m. above the town, but is now supplied by a new cut which encircles Hyderabad hill on the N. From the earliest times the hill seems to have been occupied in part by a fort called "Neran," but no trace whatever of it now exists. The modern town of Hyderabad was laid out by Ghulam Shah Kalhora in 1768 as the capital of reunited Sind. The fort was built at the same time. Ghulam Shah's tomb is at the N. end of the hill.

The **Fort** of Hyderabad is of a very irregular form, and about $\frac{3}{4}$ m. in circumference; in the centre is a large "burj," or a keep, in very good preservation, which overlooks the country for miles around. On the N. side a trench separates the citadel from the town. It is crossed by a bridge leading to one of these intricate gateways which have so often yielded to a "coup de main." Where the walls do not rise immediately from the edge of the declivity the defence is strengthened by a ditch, 10 ft. wide and 8 ft. deep. The residences of the principal Mirs, formerly within the walls of the fort, have now almost disappeared. In fact, since the explosion in the fort in 1906, very little remains but the tower, almost all the buildings, including the arsenal, being totally destroyed. Portions of Mir Nasir Khan's palace alone are kept up, in proximity to the Record Office. This palace used formerly to be occupied by the Commissioner in Sind on his tours and by other officers of rank when visiting Hyderabad. Sir C. Napier frequently resided in this palace, and in it he held his Grand Darbar on 24th and 25th

May 1844, when every Chief in Sind came from far and near to submit himself to the conqueror. One room in Mir Nasir Khan's palace, styled the Painted Chamber, is still tolerably perfect, and gives some idea of what the effect must have been when all was uninjured. In the recesses various historical subjects connected with the Kalhora family are delineated. A picture in one recess represents an interview between one of the Amirs and an English officer in political uniform who is intended for Sir James Outram. The visit to the fort should conclude with a walk round the ramparts and an ascent to the top of the circular tower, whence a fine view of the surrounding country, with the Fuleli on one side, winding through the dusty plain, and, on the other side, of the rapid Indus, with its buttress of rock in the background, will be obtained.

Undoubtedly the finest building in Hyderabad is the Kacheri, built in a modified classical style in 1912, at a cost of about Rs. 2½ lakhs. It consists of Revenue and Judicial offices. Just S. of it, and overlooking the railway, is the tomb of Shah Makkai, a saint whose very name is forgotten. The tomb is interesting only for the battle-mented mud wall which was built on this Southern spur as a counterpoise to the similarly treated tomb of Ghulam Shah Kalhora. The main bazar running for over a mile in a straight line from the fort gate to the new market is worth a visit.

The tombs of the Kalhoras and Talpurs cover the N. portion of the hill on which Hyderabad is built. The tombs of the Talpurs are very beautiful, but are not in such exquisite taste as that of **Ghulam Shah Kalhora**, the description of which may serve for all. On entering the enclosure by a small but richly-carved door the visitor is impressed by the beautiful symmetry of the mausoleum and the religious feeling displayed

in the decorations. Formerly latticed windows in a lofty dome sparingly admitted the light, and shed a subdued lustre over an exquisitely-carved marble tomb, at the same time revealing the rich fresco paintings on the walls, without giving them too much prominence; but the dome fell in a few years ago and has been replaced by a flat roof. The beautiful marble railing surrounding the tomb was shattered by the fall, and only the fragments of it remain. Over one of the archways is an inscription in Persian, written by the order of his son Sarfaraz, whose tomb is in a burial-ground below the hill, and was built in 1785 A.D. It is painted inside, and is in good repair. There are four other tombs of the Talpur family—that of Mir Karam Ali, a domed rectangular building, with a turret at each corner, built in 1812, with marble fretwork, and roofed with coloured tiles; that of Mirs Murad Ali, Nur Muhammad, Nasir Khan, and Shahdad Khan, built in 1847, with white marble tombs inside; that of Mir Ghulam Shah and Fazl Ali, erected in 1855; and that of Mir Muhammad, built in 1857. All the Talpur tombs, except Karam Ali's, are kept in good order at the cost of surviving members of the family.

The **Cantonment** lies to the N.W. of the town. There is a fine range of barracks for Europeans. Not far off is the church of St Thomas, built in 1860, at a cost of Rs. 54,000. It can hold 600 persons. It has several memorial windows, and on the N. side of the communion-table is a brass showing the number of officers and men who fell at Miani and Dabo (1843). The Roman Catholics have had a church at Hyderabad from the time of the conquest.

Hyderabad is famous for its embroideries (this refers presumably to the embroidery of "Nats," the leather covers for the saddles of riding camels) in silk and gold

and its silver tissues. There are four or five famous fabricants, each working with a different stitch. The patterns are of endless variety. All the work is made on a simple wood frame.

In the Mirs' time there was a great demand for enamelling, the principal sardars vying with each other in the beauty and costliness of their swords, matchlocks, and horse-trappings, which were profusely decorated with enamelled ornaments. In enamelling on gold the colours red and crimson are chiefly used, and blue and green with silver.

British political relations with the Amirs of Sind began in 1809, when the first Lord Minto concluded a treaty of "eternal friendship" with three of the Chiefs. A further treaty was made in 1832: but Shikarpur, Bukkur, and other places were annexed in 1838, and in 1839 the Amirs were forced to acknowledge the suzerainty of the E. India Company. On 15th February 1843, Major Outram was attacked in the Residency at Hyderabad, and two days later Sir C. Napier completely defeated the Amirs at Miani (see below).

A memorial pillar has been erected near the river just S. of One Tree Bunder, 3 m. from Hyderabad, to commemorate the site of the Residency so ably defended by Major Outram.

A visit can be made to the famous battlefields of **Miani** and **Dabo**, on which, in 1843, was decided the fate of Sind. The three places form a triangle, Miani being 6 m. to the N.W. of Hyderabad and Dabo 5½ m. to the E.

On the E. side of the monument at Miani, enclosed in a well-kept garden, are the names of the officers who fell.

A branch line (broad-gauge) goes S. to (62 m.) *Badin*, the starting point of a projected extension across the upper end of the Runn of Cutch to Viramgam (p. 233).

From Hyderabad the Jodhpur (metre-gauge) Ry. runs by (55 m.) Shadipalli to (310 m.) Luni junction (p. 214). At Mirpur Khas, 42 m. E. of Hyderabad, a stupa, 50 ft. each way, with terra-cotta figures of Buddha, has been excavated. At Chhor (89 m. E.) a road runs (15 m. S.) to **Umarkot**, a picturesque mediæval Rajput fort, celebrated as the birthplace of Akbar. In 1542 A.D. the Emperor Humayun, after defeat by Sher Khan Sur of Ghor, fled to the desert, and obtained succour at Umarkot from the Rana. He married Hamida Begum at Pat (p. 414) on the Indus, and on his return to Umarkot the child who afterwards became the Emperor Akbar was born. The Sindi tradition is that Akbar was born under an "ak," bush (whence his name), and a stone to-day indicates the supposed site.

The main line now crosses the Indus to

650 m. Kotri (D.B.) (loop-line to Rohri, pp. 411, 415), a place of some importance (pop. 9119). The railway at this point quits the Indus for Karachi, which lies some 50 m. N.N.W. of its mouth.

702 m. Jangshahi station (R.). A good road runs 13 m. to **Tatta** (pop. 8470). Motors available: fare, Rs.2 per seat, or Rs.8 for car. At mile 11 on the Makli Hill there is a D.B. (no provisions procurable). Partridge, grouse and snipe found around Tatta: the great Indian bustard on the plains; hog and deer in the Tatta forests.

Tatta as late as 1739, a great city of 60,000 inhabitants, first comes into notice as the seat of the Samma rulers of Lower Sind, who made it their capital about 1340 A.D., and who reached the zenith of their power in the reign of Nizamuddin (1461-1509 A.D.), the Jam-Nindo still remembered by the people as the prince-hero of the

Golden Age of Sind. After his death the Samma rulers gave place to Arghuns and Turkhans, invaders from the N. In 1555 a Portuguese fleet of 28 ships, under Pedro Baretto Rolim, arrived at Tatta, and, in the absence of the ruler in Upper Sind, sacked and burned the city and carried off such booty as had rarely been taken in Asia. The last Turkhan died in 1612, and Lower Sind became a province of the Mughal Empire, which it remained till 1739, when the Empire collapsed beneath the onslaught of Nadir Shah. In the chaos which ensued new Sindi dynasties arose with capitals further N. at Khudabad and Hyderabad, and Tatta declined to a mere country town.

The most remarkable sight in Tatta is the great mosque, begun by Shah Jahan in 1647 A.D. and finished by Aurangzeb. It has been a splendid edifice, though now much decayed. The glory of ancient Tatta is not, however, to be sought in the town, but on the Makli Hill, a couple of miles W. on the Jangshahi road. This vast necropolis, covering an area of 6 sq. miles, is said to contain 1,000,000 graves, and probably contains far more. Among the innumerable tombs rise the remains of many a stately mausoleum, a few of which still survive in something of their former splendour.

Immediately N. of the steep incline which carries the road down the Eastern scarp of the hill, is the tomb of Mirza Jani Beg, the last of the Turkhan rulers. It was built in 1599 A.D., and is of brick, the faces of which are glazed blue and blue-green.

Farther N. rises the splendid mausoleum of Nawab Isa Khan, Governor of Sind, erected between 1628 and 1644 A.D. It is by far the largest and best preserved monument on the hill, and is built entirely of stone in the Fatehpur-Sikri style, richly decorated

throughout with surface tracery. It stands on a raised platform in the middle of a court, and is surrounded by a veranda on carved pillars, with an upper storey. Stairs on the E. lead up to the roof.

A little distance to the E., on the very edge of the hill, is a low building of stone in the same style, containing the tombs of the ladies of the zenana of Nawab Isa Khan. The walls inside are covered with carving in low relief, the wonderful variety of the patterns being only equalled by their exquisite design and perfect finish. The view from the Eastern doorway across the intervening lake to where the present town of Tatta rises on the ruins of dead cities of the past, is one of the most beautiful in Sind.

Near the N.W. corner of Nawab Isa Khan's tomb is that of Diwan Shurfa Khan, in whose lifetime it was built (1638 A.D.). It is a massive square structure with heavy round towers at the corners, and is constructed of fine brickwork, pointed in the joints with strips of dark blue tiling. The dome has been covered with blue glazed tiles, a portion only of which remains.

The visitor should proceed 1½ m. farther N. along the crest of the hill to the tomb of the famous Nizam-u-din (Jam-Nindo). This is a square stone structure without a dome, which some have thought was built from the remains of a Hindu temple. The W. façade is magnificently carved in a purely Hindu style. Inside, the springing of the great arches to support the dome, which was never built, affords an excellent example of the early attempts of Hindu craftsmen to arrive at the Muhammadan arch by their own method of horizontally-laid stones. The noble Muhammadan simplicity of the interior is in striking contrast with the Hindu richness of the W. façade.

753 m. **KARACHI** (*Kurrachee*) Cantonment (or *Frere Street*) station *. The *M'Leod* (or *City*) station is 2 m. farther on towards the harbour.

The cheapest route from London to Quetta, Multan, Lahore, and North-West India is *via* Karachi. Through tickets by the P. & O. and other steamer lines to Karachi, 483 m. (P. & O. passengers change to B.I.S.N. mail steamer in Bombay harbour), are issued at the same price as tickets to Bombay. There is a quick weekly service by the B.I.S.N. from Karachi to Muscat, Bandar Abbas, Bushire, and Basra on the Persian Gulf.

An airship shed was completed in 1928 in connection with the Empire air service to India. Its dimensions, 850 ft. in length, 180 ft. in breadth, and 170 ft. in height, place it among the world's largest buildings.

Karachi (lat. 24° 51', long. 67° 4' E.; pop. 216,883) is the chief town in Sind. It is situated outside the delta of the Indus, and owes its existence to the natural rock-bound haven formed by the S. extremity of the Khirthar mountains. It existed as a mere fort from 1725 to 1842, when it was yielded up by the Talpur Amirs to the British. It was the genius of Sir Charles Napier that first discerned the advantages of this natural harbour over the old capital of the Amirs at Hyderabad. It is to-day the hdqrs. of the Commissioner, the Judicial Commissioner and the General commanding the Sind Rajputana Dt. It has risen rapidly as a flourishing seaport with a trade whose exports had in 1926-27 a value of 32.43 lakhs and imports of 39.12 lakhs. In 1926-27 the steamers entering the port numbered 1708, with a tonnage of 4,436,000 tons. The income of the Port Trust is £400,000, and of the Municipality 44 lakhs. N. of the station are the wireless station, the golf links, the Napier Barracks and Station Hospital,

a fine block of buildings extending over the maidan for 1 m., with accommodation for 1500 European troops. E. of the Lines is the **R.C. Church**. W. of Frere Road from the railway station is the **Frere Hall**, built in 1865 in honour of Sir Bartle Frere. The building contains a large ball-room and public meeting-room (which is fitted with a stage and false floor and fixed seats in tiers for theatrical purposes), and the Karachi General Library. In the grounds are two fine statues, one of the Queen-Empress Victoria, unveiled by King George V., then Prince of Wales, in 1906, and the other of King Edward VII., unveiled by Lord Willingdon, Governor of Bombay, in 1916; close by stands the Baluch Regiment Memorial, unveiled by the Prince of Wales in 1922. Adjoining the Frere Hall compound are the handsome buildings of the Sind Club, the Collector's Bungalow, Karachi Gymkhana, etc.

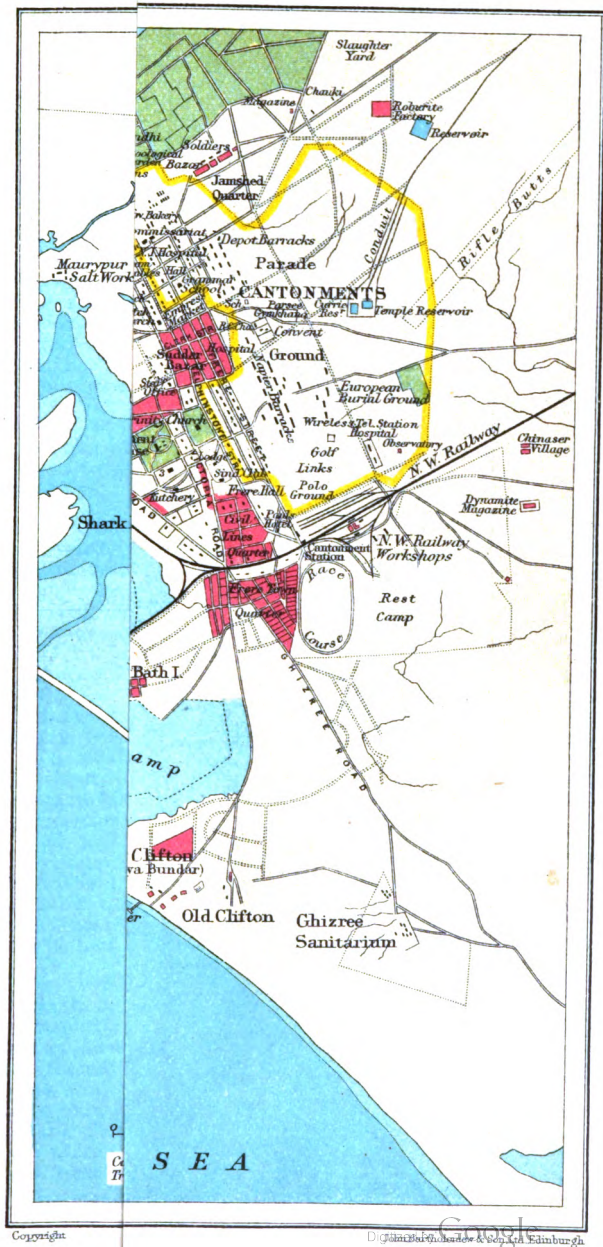
Close by, W., is **Government House**, built by Sir C. Napier, bought from him by Government, and now the residence of the Commissioner in Sind. Behind it is **Trinity Church** (the garrison church), with its square campanile originally 150 ft. high, but reduced in 1904 to 119 ft. by the removal of the top. It was built at the instigation of Sir Bartle Frere, and contains a fine stained-glass window, put up in honour of Sir C. Napier and the victors of Miani. Beyond, W., are the Masonic Hall and Y.M.C.A., and **Arsenal**; and a few yards farther are **St Andrew's Church** (Scotch Kirk), and the Karachi Artillery Volunteers' Headquarters, and near by, E., is the Empress Market.

On the N.W. side of the Cantonment is the **Zoological Collection** in the Gardens—well worth a visit.

From **Government House**,

M'Leod Road leads to a fine block of buildings containing the quarters of the **European and Persian Gulf Telegraph Staff**, the **General Post Office**, the **D. J. Sind College**, the **Victoria Museum**, the **Burns Garden**, and the **Municipal Offices**. On the left of the road is the **Karachi City Railway Station**. Beyond are the **Court House**, containing the offices of the **Judicial Commissioner** and the **District Judges**, the **Chamber of Commerce** and the offices and godowns of the **European merchants**, **Banks**, and **Steamship Agencies**; and N.W. of these lies the native city. The Indian city lies to the N. of **M'Leod Road**, between it and the **Layari River**, and is traversed by **Bandar Road**, which joins the former near the memorial clock-tower of Sir Wm. Merewether. The **Bunder Road** leads from the **Indian Infantry Barracks**, in the E., to the **Napier Mole** running to the **Karachi Harbour**. Along or near it are the following buildings: the **Indian Infantry Mess**, the **Headquarters Sind Volunteer Rifles**, **Tramway Office** and **Stables**, **Y.M.C.A.**, **Parsee Girls' School**, **Richmond Crawford Veterinary Dispensary**, **Civil Hospital** and **Epidemic Diseases Hospital**, **C.M.S. Mission** and **Church**, **G. H. Khalikdina Hall**, the new **Revenue buildings**, **Max Denso Hall**, the **Port Trust Offices** and various business premises. New Municipal offices have been constructed.

2 m. along the **Napier Mole** is **Kiamari** (4 m. from the Cantonment: fare, first-class victoria, Rs.2-8), a busy shipping port, with its long line of wharves, and connected with the Cantonment and Indian town by rail, tram, road, telegraph, and telephone. In the old days this was an island. At **Kiamari** the **Karachi Harbour** commences. It is a first-class harbour, capable of accommodating the largest steamers, and owes its existence



to the strenuous exertions of Sir Bartle Frere. It was designed by Mr Walker, commenced in 1854 and completed in 1883, since when additional railway facilities have constantly been added. There is very good sea-fishing to be had in the harbour, which is famed for its fish and oysters. Near the Napier Mole, on the back-water, is the Sind Boat Club-house. The Defences of the Harbour consist, besides the marine defences, of three large forts, the largest on the Manora headland, at the entrance to the harbour on the W. The lighthouse near this shows a fixed light 148 ft. above sea-level, visible 17 m. in clear weather. On the meridian of Karachi there is no land between Manora and the South Pole.

Clifton, 3 m. S. of the Cantonment, a favourite afternoon ride and drive, stands on the sea, and is approached by a good road. On Clifton Hill is the Jehangir Kothari Parade and Lady Lloyd Pier. There is a fine sandy beach here extending S.E. for miles; on which turtles in August, September, and October come up at night to lay their eggs. During the cold weather the tanks and jeels about Karachi swarm with small-game birds, while in the Baluch Mountains, 25 m. W. of Manora, ibex, urial, panther, and bear are occasionally to be found. In the Hab River, the boundary between India and Baluchistan (20 m. from Karachi), good mahsir fishing can be had.

Magar Pir, 11 m. N. of Karachi, is well worth a visit. For a detailed account of this curious place see *Dry Leaves from Young Egypt*,¹ p. 218, and Burton's *Sind*, I, 48. As the place can be comfortably seen in an afternoon from Karachi, there is no necessity to stop there. The *dharmasala*, or R.H., is unsuitable for Euro-

peans; a good motor-road runs to within a mile. A Leper Asylum has been established here.

From the roots of a clump of date-trees a stream of hot water gushes out, the temperature of which is 133°. On the W. side of the valley is a temple surrounded by a thick grove and close to a swamp caused by the superfluous waters of the spring. There is also a tank surrounded by a 5-ft. mud wall, and containing some eighty or ninety crocodiles, which, as they attract a considerable number of visitors, the Muhammadans in charge of the Pir's Tomb regard as sacred. A brisk and remunerative business is done by these custodians in killing goats for visitors who wish to see the crocodiles fed. The crocodiles are of the snub-nosed species, different from the long-snouted *gharial* of the Indus.

Rohri (p. 404) to Kotri by the loop-line on the right bank of the Indus.

Opposite to Rohri, in the Indus, is the *Island of Khwaja Khizr*. Here is a mosque of great apparent antiquity. It has an inscription, with the date 951 A.D. The shrine of Khizr, who was also called Zinda Pir, or "the living saint," is venerated by Hindus and Muhammadans alike.

A little to the S. of the Isle of Khizr is the larger *Island of Bukkur*. It is a limestone rock of oval shape, 800 yds. long, 300 yds. wide, and about 25 ft. high. Almost the whole of it is occupied by a fortress, which has two gateways, one facing Rohri on the E., the other Sukkur on the W. As early as 1025 A.D. we hear of Abdur Razzak, Minister of Mahmud of Ghazni, expelling an Arab Governor from Bukkur. In the beginning of the 13th century it was an important fortress of Nasir-ud-din Kabachas.

¹ In the Library in the Frere Hall.

In 1327 A.D., Bukkur seems to have been a place of note, for the Emperor Muhammad Tughlak sent persons of importance to command there. Under the Samma Princes the fort changed hands several times, being sometimes under their rule and sometimes under that of Delhi. During the reign of Shah Beg Argun the fortifications were rebuilt, the fort of Alor being destroyed to supply the requisite material. In 1574 it was delivered up to Keshu Khan, an official of the Emperor Akbar. In 1736 it fell into the hands of the Kalhoras, and subsequently into those of the Afghans, who retained it till it was taken by Mir Rustam of Khairpur. The Amirs attached much importance to this fort. But on our advance to Kabul in 1838, it was placed at the disposal of the British Government, and was used first as an arsenal, and then, until 1876, as a prison for Baluchi robbers.

The Indus, which runs here with great rapidity, is crossed by the grand *Lansdowne Bridge*, erected on the cantilever principle, connecting Rohri with the Island of Bukkur; the line then crosses the island to Sukkur by another bridge of the ordinary type. The great span between Rohri and Bukkur is 840 ft. from centre to centre of the cantilevers; each cantilever is 320 ft. long, and the central girder connecting them is 200 ft. long. The roadway is 18 ft. wide in the clear, or enough for a line of carts in each direction. A single line of railway is laid in the centre. A path $4\frac{1}{2}$ ft. wide for foot and pony traffic is also provided on each side outside the railway, and can be used at all times. The total weight of steel and iron employed was nearly 3000 tons.

3 m. **Sukkur station** (R., D.B.) and railway R.H. near the station, * the headquarters of the Sukkur

District, standing on the right bank of the Indus, has a population of 42,759, and is well drained and clean. There are some locomotive shops of the North-Western Railway here. A series of low, bare limestone ridges slope down to the Indus, and on them, about 1 m. off, is the European quarter. This quarter, together with a large Indian town, is called **New Sukkur**, to distinguish it from the old town of the same name. The only sights are the tombs of Shah Khair-ud-din, built about 1758, and Muhammad M'asum, in the Cantonment, at the foot of a tower 90 ft. high, which he erected, and which overlooks the country for many miles. The town was ceded to the Khairpur Amirs between 1809 and 1824. In 1833 Shah Shuja'a defeated the Talpurs here with great loss.

The site of the Sukkur Barrage, the largest in the world, and named after Sir George (now Lord) Lloyd, the late Governor of Bombay, is 2 m. W. of New Sukkur. The total estimated cost is over £12,000,000; and the scheme will irrigate 500,000 more acres than the total cultivated area of Egypt. On an island rock in the Indus, commanding a good view of the Lansdowne Bridge, is the picturesque temple of Shri Sadbella, with a monastery of Udiasin Sannyasis, founded in 1823.

18 m. **Ruk junction station** (R.). From here the Sind, Pishin, and Quetta Railway branches N. (see p. 415).

52 m. **Larkana station** (D.B.) is a municipal town (pop. 17,723), the capital of a district of the same name. The country surrounding it is fertile and populous, and perhaps the finest tract in the whole of Sind. Light ry., N.W., to Silra Shahdad Kot.

66 m. **Dokri**. $8\frac{1}{2}$ m. E. by motor road from this station is **Mohenjo-**

daro (66 m. S.W. from Sukkur in the Larkana district). Tongas available on application to the station-master at Dokri. No R.H. at Mohenjo-daro at present. Application for a free pass to the ruins and the Museum should be made to the Archaeological Camp Office at Mohenjo-daro.

Mohenjo-daro (the "Mound of the Dead"), which is being excavated by the Archaeological Department, is a site of the Chalcolithic age, and like Harappa (p. 401), representative of what is provisionally known as the "Indus" Civilisation. It covers the remains of five or six successive cities built one on the ruins of another. The visible ruins cover about 250 acres, but the outlying parts of the ancient cities are hidden deep beneath the alluvium of the surrounding plain. Near the north-west corner of the site and surmounting the highest mound is a **Buddhist Stupa** of the time of the Kushan king Vasudeva I. (2nd century A.D.). With this exception all the exposed buildings belong to the last three prehistoric cities and are referable to the period between 3500 to 2700 B.C.

West of and close to the Buddhist Stupa is the **Great Tank** or **Bath**, which probably served for ablution purposes in connection with a temple. It was 39 ft. long by 23 ft. wide and enclosed on all sides by a number of halls and chambers. A flight of steps, once paved with wood, led down into it at either end. In order to render the tank waterproof its brickwork was laid in gypsum mortar and further protected by a backing of bitumen. Near the S.W. corner of the tank is a drain for emptying it. After passing through an inspection chamber provided with a manhole, this drain flows into a 6-ft.-high culvert furnished with a corbelled roof. To the N. of the tank and separated from it by a

narrow lane is a double row of well-paved bathrooms ranged alongside a passage, down which runs an open drain. Each room has its own staircase leading to the top, and is so planned as to secure complete privacy for its inmate.

Apart from the above group of buildings, which includes several other massive and imposing structures, the remains excavated at Mohenjo-daro are mainly residences and shops, the best examples of which are to be seen on the mounds to the east and south-east of the Buddhist Stupa north of the road to Dokri. Here, there are a fine broad street and blocks of well-built houses, with stairways ascending to the upper floors, bathrooms, wells and underground drains. Belonging to the drainage system in this part of the city are two square sewage tanks in the main street, one of which is provided with steps inside to facilitate its cleaning. In the area to the S. of the Dokri road are several important structures, where the visitor should notice in particular the corbelled doorways and drain culverts, as well as the inclined water-chutes connecting with the street drains. From the regularity of the streets in Mohenjo-daro—in striking contrast with the winding lanes usually found in Oriental cities—coupled with the well-developed system of street drainage, it is evident that the inhabitants of the place in the 3rd and 4th millennia B.C. had advanced ideas both of town-planning and of municipal administration. The amenities, too, of their commodious and well-planned houses bespeak a degree of luxury among the ordinary well-to-do classes that was quite unknown at that period in Egypt and Western Asia.

After seeing the excavations the visitor should return to the Archaeological Camp, where, in a small provisional **museum**, he will find a most interesting collection of

antiquities from this site, including engraved seals, gold and silvery jewellery, personal ornaments, implements, weapons, domestic utensils, sculptures, figurines and painted potteries.

94 m. **Sita Road station.** Road, 7 m., to Pat, where in 1541-42 the Emperor Humayun was married to Hamida Begam, from which union the Emperor Akbar sprang (see p. 408).

142 m. **Sehwan station (D.B. in the old fort).*** The chief town (pop. 4420; 117 ft. above sea-level) of a subdivision of the same name in the Larkana District. Sehwan is renowned through the N.W. borderland as the last resting place of the Saint Sheikh Usman Merwandi *alias* Kalandar Lal Shahbaz, a Persian, who died here in 1272 A.D. The tomb of *Lal Shahbaz* is enclosed in a quadrangular building, surmounted by a dome and lantern, and is adorned with beautiful encaustic tiles and Arabic inscriptions. Mirza Jani Beg, of the Tarkan dynasty, built a still larger tomb to this saint, which was completed in 1639 A.D. by Nawab Dindar Khan. The gate and balustrade are of wood, encased in hammered silver, the gift of Mir Karam 'Ali Talpur, who also crowned the domes with silver spires. A great fair is held in Sehwan annually on the 18th *Shaaban*, when Hindus and Muhammadans join in paying reverence at the shrine; for here, as in other places in Sind, the Muhn. saint has supplanted a Hindu predecessor. Much earlier, Sehwan was famous as the capital of the Buddhist prince-ascetic, Bhartari Hari, brother of Vikramaditya Chandragupta II, the 3rd Gupta Emperor (375-413 A.D.)

The town of Sehwan rises on a conical hill. A deep valley separates it from the fort, which is built on an artificial mound 60 ft. high and measuring at the top 1500 ft.

by 800 ft. No record has survived as to the origin of the fort.

The **Manchhar Lake** * is not very far from Sehwan to the W.: Bubak Road (8 m.) is the nearest rly. station. It is a large natural depression, supplied with water by hill torrents and by Indus water, which reaches it during the inundation season by way of the W. Nara Canal and the Aral River. It covers an area of 160 sq. m. in the wet season, but shrinks to about half that size at other times. In the cold weather there is abundance of water-fowl shooting, and excellent snipe, quail, and partridge shooting round the edge of the lake, and an extraordinary number of fine fish.

The fish are generally caught with spears or nets. The boat, which is flat-bottomed, is propelled by one man, while another, armed with three or four light cane spears, 8 ft. long and barbed at the tip, stands at the prow watching the water; as soon as he sees a fish flash through the weeds, with which the lake is covered, he hurls a handful of spears in that direction, and is sure to strike one or two fish, which, as the spear becomes entangled in the weeds, cannot go far, and are followed and lifted into the boat.

For the other method of catching the fish an ingenious circular enclosure of nets, supported by poles, is laid down in the lake. A flotilla of small boats containing men with drums and other noisy instruments surrounds the enclosure at some distance and gradually draws nearer. The fish, frightened by the din, and not daring to escape through the boats, press heavier and nearer to the net. As the boats approach, huge *dambhros* are seen flinging themselves into the air to a height of from 3 ft. to 4 ft., hoping to jump over the lower net, but only to strike against the upper one and fall into the bag below,

a self-made prey. In the meantime men with spears hurl them at the huge *gandams*, which are unable to leap, and, lifting them high in the air over the net, deposit them in the boats. Divers then go inside the net and examine it carefully under water, securing such fish as may be endeavouring to force a passage through it. These men in their habits seem almost amphibious.

153 m. from Sukkur is Tirth Laki station (R.), good quail, duck, and snipe shooting in the neighbourhood. The railway runs through the Laki Pass, at an elevation of 200 ft., the Indus lying below. This range of hills contains several hot springs, and shows many signs of volcanic action. There are also lead, antimony, and copper in them, though not in great quantities.

228 m. from Sukkur is Kotri station (R.) (p. 408). By this loop route Karachi Cantonment is 782 m. from Lahore.

General Note on Sind.

Shikaris and camels cannot be obtained without previous notice. It is advisable to invite the assistance of the Collector of the District. The railway runs through the following Districts:—Sukkur, Larkana, Nawab Shah, Hyderabad, and Karachi. The beaters and camel men are all keen sportsmen, but the tariff should be arranged before starting. Riding camels cost about Rs.3 per day; baggage camels about Rs.1-8; beaters 12 annas. In nearly all parts of Sind there is good small-game shooting—duck, quail, snipe and black partridge—and a good shot may get fifty brace of duck or snipe on a lucky day, and frequently twenty to thirty brace. A pleasant trip can be obtained by hiring a country boat at Sukkur or Kotri and sailing down the Indus, the

shooting-grounds being generally most accessible from the river: in this manner crocodiles, pig, hog-deer, and many varieties of water-birds—e.g., pelicans, flamingoes, and spoonbills—can be added to the bag.

Reference may be made to *Sind: a reinterpretation of The Unhappy Valley*, by J. Abbott (Oxford Univ. Press, 1924).

(b) Ruk Junction to Quetta and Chaman.

Ruk junction station (R., D.B.), 15 m. on the Karachi side of Sukkur (see p. 412). The first station of importance on the Sind-Pishin Railway is

11 m. Shikarpur station (D.B. and railway R.H.)★, a municipal town, founded 1617. The population is 55,503, of whom 20,798 are Muhammadans. The great road to Baluchistan, Kandahar, and Central Asia passes through Shikarpur, which was long a great trade depot. These conditions have, however, been changed by the opening of the railway and consequent facilities for direct trade.

The bazar is covered in on account of the heat in summer, Shikarpur, Jacobabad, and Sibi being about the hottest places in India. The old bazar has been lengthened, and the prolongation of it, called the *Stewart Ganj Market*, after a popular District officer, is well built and commodious, and is the best bazar in Sind. To the E. of the town are three large tanks, called Sarwar Khan's tank, Gillespie, and Hazari tanks. There is abundance of water for irrigation and other purposes, but the climate is very hot and dry, and the rainfall for the last ten years averaged only 2.7 in.

37 m. Jacobabad station (D.B. ½ m.) population 10,583). This was the chief military frontier station before Quetta was occupied.

The Cantonment was abandoned in 1914.

The town was planned and laid out on the site of the village of Khangarh by General John Jacob, the distinguished Political Supt. and Commandant, Upper Sind Frontier (1847-1858), who built the Residency. The upper storey was dismantled in 1879. The main porch contains a commemorative tablet. A wonderful clock made by Jacob with his own hands is working at the present day. He is buried here under a massive tomb. When he arrived in Upper Sind the whole country about Khangarh was in a state of anarchy; bodies of mounted robbers—Bugtis, Dombkis, Burdis, or Marris—swept the plains and robbed and murdered those they encountered. Khangarh itself offered a stout resistance to the 5th Bombay N.I., but General Jacob's rule put an end to all these troubles, and to him the peace of Upper Sind was originally due. Of late years Jacobabad has decreased in importance, but it is still a market town and the headquarters of a civil district. The temperatures at Jacobabad are in excess of any recorded in India, a reading of 126° Fahrenheit in the shade in the months of May and June being not uncommon.

134 m. **Sibi junction station** (R., D.B.). Hdqrs. of Political Agent, Sibi, from Oct. to May. Horse and Cattle Show in Febr. This place is in the valley of the river Nari, near the entrance of the Bolan Pass. Sibi was occupied by the British in the name of Shah Shuja from Nov. 1841 to Sept. 1842, the old fort being used as a commissariat depot. It was ceded to the British by the Treaty of Gandamak in 1879. The Victoria Memorial Hall for *jirgas* is a fine building.

From *Sibi to Bostan junction* there are two lines—the Northern,

or *Harnai*, loop-line which has maximum gradients of 1 in 25, and traverses a country inhabited mostly by Pathans; and the Southern or direct, *Mushkaf-Bolan* line. A word of warning is necessary to a visitor starting on these journeys. In the winter cold of from 22° to 23° of frost is not at all uncommon on the higher parts of the line, whilst in summer 128° inside the house is not an unfrequent temperature at Nari. It is scarcely necessary to say that the consequences of insufficient clothing may be very serious to travellers who make this trip as part of a cold-weather tour.

Sibi to Bostan and Chaman by the Mushkaf-Bolan Direct Route.

The original alignment of this railway along the Bolan was afterwards abandoned in favour of the present line. As far as Rindli, at the mouth of the Bolan Pass, the old line is still kept up, but no trains are run upon it.

From **Mushkaf** (144 m.) the line runs for 28 m. up the Mushkaf Valley with easy gradients. It then passes by the Panir Tunnel, 3000 ft. long, into the upper Bolan, and ascends by very steep gradients, some as much as 1 in 25, to **Kolpur** (196 m.). For 6 m. beyond the tunnel the works are exceptionally heavy, but from there up to **Mach** (181 m., 3250 ft.—engine changing station) they are lighter. From **Hirok** (189 m.) they become very heavy again, and the Bolan is crossed nine times.

206 m. **Spezand**, 16 m. below Quetta, is the starting-point of a railway which runs over 83 m. of desert to Nushki (see below). In 1918 the line was extended to Duzdap, 510 m. from Quetta.

222 m. **Quetta *** (Kotah) station (R., D.B., 5500 ft. above sea-

Bolan Passes, it forms one of the most important Indian frontier posts. It contained in 1921 49,001 inhabitants (Cantonments, 21,781, city, 27,220), the numbers going up in the summer to close on 60,000. In winter the cold is very severe. Numerous gardens and orchards abound in the suburbs, and the water supply is good.

Quetta was occupied by British troops in the first expedition in 1838-42 to Kabul. In 1877 a British Political officer was again posted at Quetta (which was taken in lease in 1883), since when there has been a Governor-General's Agent for Baluchistan, Sir R. Sandeman, K.C.S.I., being the first to bear the title. The present (1929) Agent is Col. H. B. St John. During the Afghan campaigns of 1878-80 Quetta formed the base of operations for the Bombay column.

The line now proceeds up the Quetta Valley by Baleli and Kuchlak to

242 m. *Bostan* junction for Harnai Route (see p. 419).

About 20 m. beyond *Bostan* junction the Lora River is passed, the first stream the traveller will have seen on the Central Asian watershed, all the rivers he has hitherto crossed draining into the Arabian Sea.

250 m. *Yaru Karez*, the station for *Pishin*, 6 m. distant; tonga service. Since the opening of the railway to Chaman the importance of *Pishin*, which is the principal place of the Achakzai-Kakar-Tarin country, has much decreased.

272 m. *Gulistan* station. In the infancy of these lines it was intended to lay a short surface railway from here towards the Ghwazha Pass, an alternative route to Kandahar. It was, how-

ever, subsequently abandoned. The main line turns due N. to

281 m. *Kila Abdullah* (R.).

291 m. (from Ruk), *Shelabagh* is at the foot of the *Khojak Pass*, and near the S.E. end of the tunnel passing under the Khwaja Amran Mountains. This tunnel is about $2\frac{1}{2}$ m. long. Passing through it, we reach *Sanzalla* (R.) and then the present ending of the line at

310 m. *Chaman* station, where there is a military outpost.

The *Khojak* Pass is surmounted by a fine military road, and those who have the opportunity should ascend it (7500 ft.) to see the magnificent view W. over the *Kadanai Plain* and N. to beyond *Kandahar*, which is hidden by intervening hills.

If the line is ever continued to *Kandahar*, it will necessarily make a long bend to the N. to obtain length for the descent into the *Kadanai Valley*, which lies far below *Chaman*, and the distance to *Kandahar*, the *Gandhāra* of ancient India and the *Arachosia* of Alexander, will be about 65 m.

Quetta-Nushki Railway.

The *Quetta-Nushki* branch of the North-Western Railway takes off at *Spezand*, 16 m. from *Quetta*. It enters the *Chagai District* at *Galangur*, 61 m. from *Spezand*, and runs in a Westerly direction to *Nushki*, headquarters of the District, 83 m. from *Spezand*; thence to *Dalbindin*, *Mirjawa* and *Duzdap* (411 m. from *Nushki*). The section, *Mirjawa-Duzdap*, 53 m., is in Persian territory.

Nushki was leased from His Highness the *Wali of Kalat* in 1899 on an annual quit-rent of Rs.9000. Trade converges at *Nushki* from *Kharan* and *Shorawak*; at *Dalbandin* from (a) *Jalk* and *Mashkel*; (b) *Garmsel* and the

Eastern Helmand ; and at Duzdap from Seistan and other parts of Persia. The temperature at Nushki varies from 52.5 in winter and 97.3 in summer. The population of the Tahsil is 9741 (census 1921).

Bostan to Sibi by the Harnai Route.

The scenery of this route, which is unsurpassed for weird grandeur in the whole world, is best seen by taking the downward route from Bostan, and should at any sacrifice of time be seen by daylight. Leaving **Bostan** (R.) the line, skirting the northern slopes of the Takatu Mountain on a gradually rising gradient, in one place forming a complete circle and passing over itself, runs to

Kach * 110 m. from Sibi, 6357 ft. From here a good motor road goes (33 m.) to **Ziarat** (D.B.), the headquarters of the Baluchistan Government in the hot weather and of Sibi District from May to October, a valley 8000 ft. above the sea, set amongst hills clothed in juniper forests. This place is entirely shut up in the winter, as it is subject to heavy snowfalls.

From Kach the line drops all the way to Sibi.

Mangi, 97 m. From here a riding road goes to Ziarat (21 m.), traversing the narrow, deep defile of Mir Kásim Tangi.

Immediately after Mangi the **Chappar Rift** is traversed. This is the shoulder of a mountain which has the appearance of being cracked from top to bottom through the solid mass of limestone. The Rift itself is passed at nearly 300 ft. above the bed of the stream, and the train at several places seems suspended in the air. The line near the Rift constantly runs through tunnels and across high bridges. On leaving it a magnificent view is obtained of the Khalifat Range (11,440 ft.),

rising sheer out of the valley on the N.W.

Harnai (R.), 58 m. from Sibi. From here the motor road to **Loralai** (Bori) and **Fort Sandeman** (Apozai) takes off.

Nari (7 m.). The line leaves the hills and runs over a flat alluvial plain to Sibi (p. 416).

ROUTE 20

SAHARANPUR by the Oudh and Rohilkhand Section of the E.I. Ry. to **Mughalsarai**, through **Roorkee** to

- (1) **Lhaksar Junction** for **Hardwar**, **Dehra Dun**, **Mussoorie**, **Landour** and **Chakrata** ;

thence through **Moradabad** and **Rampur** to

- (2) **Bareilly Junction** for **Kathgodam**, **Naini Tal**, **Almora**, and **Ranikhet** ;

thence to **LUCKNOW** and on to **Benares** by (a) **Rae Bareilly** and **Pertabgarh** (mail route) and (b) **Fyzabad**, **Ajodhya** and **Jaunpur**.

Saharanpur junction (see p. 339) is 51 m. from **Ambala Cantonment** (p. 351) and 111 m. from **Delhi** *via* **Ghaziabad** and **Meerut** (Route 15). It can also be reached from **Delhi** by the **Shahdara-Saharanpur Light Ry.** (93 m.), but there are no fast trains on this line. **Saharanpur** is the terminal station of the Oudh and Rohilkhand section of the E.I. Ry., which runs S.E. to **Lucknow** (322 m.) and (509 m.) to **Benares** and (520 m.) to **Mughalsarai**, where it connects with the main and **Grand Chord** lines of the E.I. Ry. to **Calcutta** (Route 2).

The O. and R. route is taken by the Peshawar-Calcutta mail of the E.I.R.

22 m. from Saharanpur is **Roorkee** (*Rurki*) station (D.B.). It is 43 m. by road to Dehra Dun, 65 m. to Meerut, 32 m. to Muzaffarnagar, 19 m. to Hardwar. Petrol can be procured at the C.E. College workshops, where repairs can also be effected; also in the town. Roorkee is a modern manufacturing town and military station (hdqrs. and depot of the Bengal Sappers and Miners) and stands on a ridge overlooking the bed of the Solani River. Up to 1845 it was merely a mud-built village; it is now a flourishing town of 16,716 inhabitants, with broad, metalled roadways meeting at right angles, and lined with excellent shops. It is the headquarters of the Ganges Canal workshops and iron foundry, established in 1845-1852. The canal passes to the E. of the town between raised embankments. Besides the Solani aqueduct, the Dhanauri crossing, Pathri and Ranipur super-passages, between Roorkee and Hardwar, are objects of engineering interest.

The Thomason Civil Engineering College (170 students) is named after James Thomason, Lieut.-Governor of the North-Western Provinces, who died at Bareilly in 1853, and was founded in 1847. The students are partly English youths born in the country, partly Anglo-Indians and Indians. A textile class, with textile machinery, has been formed: the laboratories have been largely increased. The library has more than 28,000 volumes available under certain restrictions to the public. It contains a reputed First-Folio Shakespeare.

33 m. **Lhaksar** junction station. A branch line from here runs N. to **Hardwar** and **Dehra Dun**, giving access to the hill stations of Mussoorie, Landour, and Chakrata.

(1) *Lhaksar Jn. to Hardwar and Dehra Dun (for Mussoorie).*

17 m. from Lhaksar, **Hardwar** station (D.B.; pop. 30,764; height above sea-level is 1024 ft.) is situated on the right bank of the Ganges, at the southern base of the Siwalik range, at the mouth of a gorge through which that great river enters the plains. It should be seen by all travellers. As the canal bank is closed by locked gates at intervals, the key should be obtained from the canal office. The Ganges here divides into several channels, intercepted by large islands, many of which are placed beyond the reach of high flood-water. One of these channels commences about $2\frac{1}{4}$ m. above Hardwar, and flows by it, and by Mayapur and Kankhal, rejoining the parent stream a little below the last town. The Ganges canal system commences at Hardwar, the head-waters being taken from a spot on this bank between Mayapur and Kankhal.

The Bhimgoda headworks were designed to remove difficulties in controlling supply of water for the Ganges Canal. The length of the weir is 2000 ft., divided into six bays of equal length. It can pass a flood of 445,000 "cusecs" over the crest.

The town is of great antiquity, and has borne many names. It was originally known as *Kapila*, or *Gupila*, from the sage *Gupila*, who passed a long period here in religious austerities at a spot still called *Kapila Sthana*.

In the 7th century A.D. the Chinese pilgrim *Hiuen Tsang* visited a city which he calls *Mo - Yu - Lo*, which General *Cunningham* identifies with *Mayapur*, a little S. of the modern *Hardwar*.¹ *Timur* sacked the place in January 1399. The name of *Hardwar*, "Door of *Hari* or *Vishnu*," is comparatively modern, and probably

¹ For the ancient history of Hardwar, see *Archaeol. Rep.*, 2, 231.

does not date farther back than 1400 A.D.

The great object of attraction is the temple of *Gangadwara* (see below) and the adjoining bathing ghat. This ghat, which is known as *Hari-ke-charan*, has its name from the *charan*, or footprint of Hari (Vishnu) impressed on a stone let into the upper wall, which is an object of great veneration at the annual gathering. Each pilgrim struggles to be first to plunge into the pool after the propitious moment has arrived, and stringent police regulations are required to prevent the crowd from trampling one another to death and drowning each other in the sacred water. In 1819, 430 persons lost their lives in this manner, after which accident Government built the present enlarged ghat of 60 steps 100 ft. wide. The cleansing from all sins is supposed to result from bathing in the Ganges here. The great assemblage of pilgrims takes place on the 1st of Baisakh (April-May), the day on which the Ganges is said to have first appeared, and when the Hindu solar year begins.

Every twelfth year, the planet Jupiter being in Aquarius, a feast of peculiar sanctity occurs, called a *Kumbh-mela*, attended by enormous crowds. In ordinary years the pilgrims amount to 100,000, and at the *Kumbh-mela* to 300,000. Riots and bloody fights used to be common; in 1760, on the last day of bathing (10th April), the rival mobs of the Gosain and Bairagi sects had a battle, in which 18,000 are said to have perished. In 1795 the Sikh pilgrims slew 500 Gosains. The last *Kumbh-mela* in April 1927 passed off quietly; but a barricade gave way and several persons were crushed to death. It was estimated that between 500,000 and 600,000 were present on the great bathing day: elaborate railway, lighting, and sanitary arrangements were required and made.

Gangadwara is celebrated in the Puranas as the scene of Daksha's sacrifice, to which he neglected to invite Siva, the husband of his daughter Sati. Sati attended the sacrifice in spite of Siva's warning not to do so, and was so shocked at her father's disrespect that she went to the bank of the Ganges, and by her own splendour consumed her body. Enraged at Sati's death, Siva produced Virabhadra, who cut off Daksha's head and threw it in the fire. Siva restored Daksha to life, but as his head had been consumed, replaced it with that of a goat or ram. The spot where Daksha is supposed to have prepared his sacrifice is now marked by the *Temple of Daksheswara*, a form of Siva. It is at the S. end of Kankhal, $2\frac{1}{2}$ m. below the bathing ghat. Around the temple are several smaller ones of no interest.

There are three *old temples* at Hardwar—to Narayana-shila, to Maya-devi, and to Bhairava.

The *Temple of Narayana-shila* is made of bricks, $9\frac{1}{2}$ in. square and $2\frac{1}{2}$ in. thick, and is plastered on the outside. The *Temple of Maya-devi* is built entirely of stone, and General Cunningham thinks it may be as old as the 10th or 11th century. The principal statue, which is called Maya-devi, is a three-headed and four-armed female in the act of killing a prostrate figure; in one hand is a discus, in another what resembles a human head, and in a third a trident. Close by is a squatting figure with eight arms, which must be Siva, and outside the temple is the bull Nandi. Outside the *Temple of Sarvvannath* is a statue of Buddha under the Bodhi-tree accompanied by two standing and two flying figures. On the pedestal is a wheel, with a lion on either side.

From Hardwar many pilgrims proceed to visit the shrine of Kedarnath, a name of Siva, and that of Bhadrinath, far up in the

Himalaya Mountains ; also Rishi Kesh (14 m.). Motors for Rishi Kesh available at Hardwar : Rishi Kesh is 6 m. from Rishi Kesh Rd. Stn. on a short branch line from Hardwar.

49 m. from Lhaksar **Dehra Dun** (or Doon) is the headquarters of the Dehra Dun District and the railhead for Mussoorie. By road Dehra Dun is 43 m. to Roorkee, 60 m. to Chakrata (D.B.), (pop. 55,623) 43 m. to Saharanpur, 7 m. to Rajpur, 31 m. to Hardwar. Petrol usually obtainable from Fitch & Co., on the Rajpur Road. At Kalsi, 32 m. from Dehra Dun, on the Chakrata Road, near the D.B., on the right bank of the Jumna, is the Kalsi stone, inscribed with an edict of Asoka. Dehra itself (86,813 inhabitants) is prettily situated in the midst of a mountain valley 2300 ft. above sea-level. It was founded by Guru Ram Rai, who settled in the Dun at the end of the 17th century. His temple, on the pattern of the mausoleum of the Emperor Jahangir at Shahdara, forms the chief ornament of the town. At Dehra Dun is the Indian Forest College, with which is incorporated the well-equipped Forest Research Institute. In March 1922 the Prince of Wales' Military College was opened : its object is to train Indian youths to take their place at the Sandhurst Military College and later to hold the King's commission. The place is also the headquarters of the Viceregal Bodyguard ; and two mountain batteries and three Gurkha regiments are stationed here. Dehra enjoys a great reputation as a hill resort and has a large resident pop. of Anglo-Indian and Indian pensioners.

In the earliest ages of Hindu legend Dehra Dun formed part of a region known as Kedarkhand, the abode of Siva, from whom also the Siwalik Hills are called. Here Rama and his brother are said to

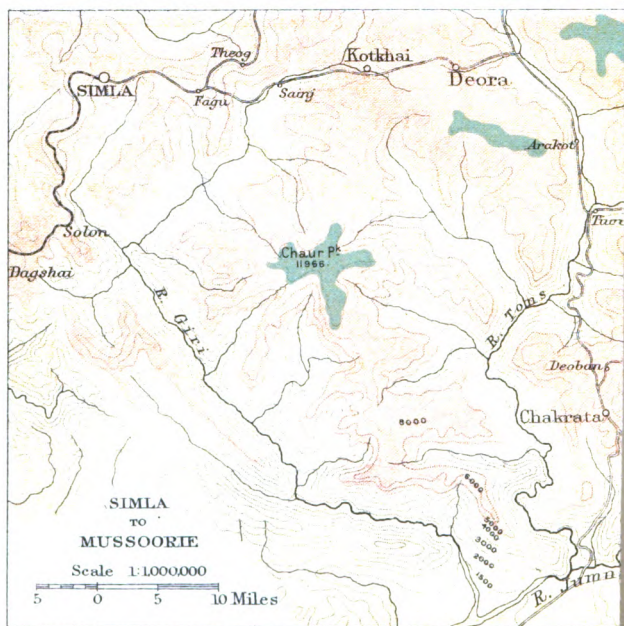
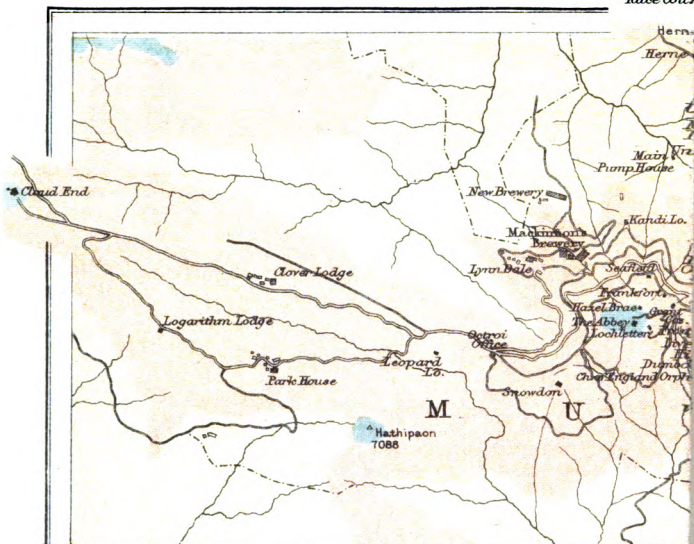
have done penance for killing Ravana, and the five Pandavas stopped on their way to the snowy range where they immolated themselves. Authentic history knows nothing of Dehra Dun till the 17th century, when Ram Rai was driven from the Punjab and the Sikh Guruship on account of doubts as to his legitimacy. In 1757 Najib-ud-daula, Governor of Saharanpur, occupied the Dun, but he died in 1770, when the country was swept by various invaders, last of all the Gurkhas. At the end of the Gurkha War, in 1815, these ceded the country to the British, who had easily occupied Dehra, and taken the strong hill fortress of Kalanga after a gallant defence, in which Sir Rollo Gillespie, the gallant soldier who suppressed the Mutiny at Vellore (p. 609), was killed. There is a monument to the slain a short distance from Dehra.

The approach to Mussoorie from Dehra is by Rajpur * (7 m.), a large village (3000 ft.). The journey is now made by motor car as far as Bhatta, 4 m. from Rajpur and 11 m. from Dehra ; for the remaining 3 m. to Mussoorie, there is a choice of dandy, rickshaw, or pony ; but it is hoped to extend the motor road as far as "Sunny View" in the course of 1929, which will leave only 1 m. of bridle-path. The usual charge for a seat in a car (from Dehra to Bhatta) is Rs.4 ; a small car can be hired for Rs.15, and a bazar taxi (liable to tyre bursts and breakdowns) for Rs.3 or Rs.4. The supply of ponies at Bhatta is irregular, as they have to be sent either from Rajpur or Mussoorie ; but they can be had for Rs.1-8-0 ; rickshaw, Rs.3. Tongas are practically extinct on the Dehra-Rajpur road. A dandy from Rajpur to Mussoorie (8 m.) costs Rs.5, and a pony, Rs.2-8-0. Toll of Rs.1-8-0 must be paid in addition.

At *Jharipani* there is water and a bazar ; and here, at an elevation



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of 5000 ft., are the first houses of the European residents.

4 m. **Mussoorie**, * (pop. 16,744), one of the best-known hill-stations in Northern India, is situated upon one of the outer ranges of the Himalayas, which lie to the N. of Dehra Dun. The hill on which it is built rises from the plains in the form of a horse-shoe gradually ascending to the centre, and enclosing in the hollow a number of ridges, which lose themselves in the mass above. Ridges also run down from the back of a hill to a valley in which flows a tributary of the Jumna; between the ridges N. and S. are deep, wooded gorges. Most of the houses are built at an elevation of from 6000 to 7200 ft., mainly on the S. side of the hill. The view from Mussoorie over the valley of the Dun and across the Siwalik Hills to the plains is very beautiful, as also is the view towards the N., which is bounded by the peaks of the snowy range. The hills, on the side nearest the plains exposed to the prevailing winds, are nearly bare, and the visitor misses the pine and deodar forests which form so beautiful a feature at Simla and other Himalayan stations. To the N., however, not far below the ridge, trees are plentiful. They are principally oak, rhododendron, and fir. In sheltered places apricots, apples, pears, and cherries flourish, together with many English annual and perennial plants. Mussoorie is much frequented on account of its exceptionally fine climate, by non-official Europeans and has become very popular with Indians. Now that the handicap of the tedious journey from railhead at Dehra Dun is being removed by the completion of the motor road from Rajpur, it is likely to increase still more in favour as a permanent residence for those who desire to settle in India.

There are excellent hotels at Mussoorie, a public library, masonic lodge, club, and three banks.

Landour * (pop. 1405) is a little to the S.E. of Mussoorie, connected with it by a narrow spur 200 yds. long and from 20 yds. to 30 yds. in breadth, with a sheer precipice of from 80 ft. to 100 ft. on either side. It rises rather abruptly to the Landour Hill, the highest point of which is about 900 ft. above the average of the Mussoorie ridge. The houses and barracks are built upon the ascending slope of the spur and upon the precipitous slopes of the ridge. The barracks, which serve as a convalescent depot for the families of British troops, face the S. There is a permanent Anglo-Indian population at Landour and Mussoorie, and a large influx of visitors during the hot season. English and Roman Catholic churches exist at both places, with numerous schools and boarding-houses.

There is a good road from Mussoorie (148 m.) to Simla *via* **Chakrata**, a military hill station 7000 ft. above the sea, in the centre of the tract called Jaunsar Bawar (21 m.). The accommodation on the way is, however, not large, though there are forest R.Hs. at most halts, and tents, food, and servants should be taken (see p. 335). The number of marches is twelve. The highest point crossed is the Patemalla Mountain (9368 ft.), 33 m. from Simla. Motor car (4 seats) can be hired for journey from Dehra Dun to Chakrata (60 m.) for Rs.80.

Main Line from Lhaksar Jn. to Bareilly Jn.

59 m. from Saharanpur and 26 m. from Lhaksar, on the main line, is **Najibabad**. During the Mutiny the Nawab, a great-grandson of Najib-ud-daula, a Rohilla chief

after whom the place is named, revolted, and when the town was recovered in 1858, the palace was destroyed. Branch line to *Kotdwara* (15 m. D.B.), whence by road (18 m.) to the military hill station of *Lansdowne* (D.B.), which is garrisoned by two battalions of Garhwal Rifles and an Indian infantry regiment. Mail tonga daily from Kotdwara as far as Fatehpur (7 m. from Lansdowne).

73 m. **Nagina** station (D.B.), noted for its work in ebony. It is 19 m. from Bijnor (D.B.). Motor lorries and ekkas are generally available at Nagina station for **Bijnor** (which is 3 m. from the Ganges). The District of Bijnor is entirely agricultural (pop., 740,000; area 1874 sq. m.): game is scarce, even in the forests: no ruins remain of places identified as having been renowned of old. Bijnor was occupied in the Mutiny by the rebel Nawab of Najibabad. The Brahmanical threads (*janeos*) made at Bijnor have acquired a general reputation.

120 m. from Saharanpur is **Moradabad** junction (W. rooms; good D.B., 2 m.)*; 202 m. from Lucknow. Branch lines of the E.I. Ry.: (a) 101 m., to Delhi, *via* Hapur (junction for Meerut, (p. 337) and Ghaziabad; (b) 28 m., to Chandausi jn. for the line (104 m.) from Bareilly jn. to Aligarh jn. The Rohilkhand and Kumaon Rly. (metre-gauge) runs from Moradabad, 48 m., to Ramnagar (jn. at Kashipur for Lalkna on the Bareilly-Kathgodam branch of the same Ry.). The ry. station lies to the S.E. of the city (pop. 82,671) which is on the right bank of the Ramganga River. To N.W. of the town is the civil station, with a Police Training School, the largest institution of its kind. The building is spacious and handsome, and the staff is maintained at the highest point of efficiency. The

District has an area of 2285 sq. m. and a population (1921) of 1,198,653. The city is noted for its metal work, especially for inlaid work of brass and tin, some of the designs of which are extremely beautiful.

About $\frac{1}{2}$ m. N. of the railway station are the *American Church*, and the office of the Tahsildar, and 1 m. from this church is the Govt. High School, on the banks of the Ramganga, which is here crossed by a bridge of boats. To the W. of the school is the Badshahi Masjid, dating from 1634, in the reign of Shah Jahan, after whose son, Murad Bakhsh, the place was named. N. are the ruins of the fort of Rustam Khan, the Rohilla, who founded the city in 1625.

On the outbreak of the Mutiny at Meerut on 10th May 1857 the Judge of Moradabad, Mr Cracroft Wilson, and the Collector, Mr C. B. Saunders, afterwards Commissioner of Delhi, maintained themselves in Moradabad till 3rd June, but were then obliged to fall back on Meerut.

The road from Moradabad N.E. towards Naini Tal is only metalled up to the 22nd m., where it crosses the river Kosi by a ferry or bridge of boats, and beyond is not fit for motors. 22 m. S. to Sambhal, 73 m. to Meerut. The mosque at **Sambhal** bears an inscription which states that it was built by the Emperor Babar; but this is doubtful. It is claimed by the Hindus as a shrine of Vishnu; but it is in reality a specimen of early Pathan architecture. Babar's son Humayun, afterwards Emperor, was governor of the place.

137 m. from Saharanpur, **Rampur**, the capital of the Rohilla State of that name (see below, under Bareilly, for history); area 892 sq. m., pop. 453,607, annual revenue nearly 55 lakhs. The present Nawab, Colonel H.H. Sir Saiyid Muhammad Hamid Ali Khan Bahadur, G.C.S.I., G.C.I.E.,

G.C.V.O., A.D.C., was born in 1875 and succeeded in 1889. The town has been completely modernized and the buildings in the Fort reconstructed. There is a fine Guest-house. The State Library, which is admirably housed and arranged, is famous for its Oriental MSS.; it contains also a magnificent collection of portraits of the 16th to 18th centuries, which includes one of François Bernier and a contemporary one of the Emperor Babar. Among the principal treasures is a little volume of Turki verse with autograph notes by Babar and Shah Jahan.

176 m. from Saharanpur is **Bareilly junction station** * (R., D.B.) (population 129,459). From here the R. and K. Railway runs N. to (66 m.) *Kathgodam*, under Naini Tal (see p. 426), with jn. at Bhojpur, to, 30 m., Pilibhit (D.B.) and branches thence, 52 m., to Shahjahanpur, and also, 163 m., to Lucknow Jn., *viâ* Sitapur. W. from Bareilly the R. and K. Ry. runs to Budaon and Kasganj (jn. for B.B.C.I. Ry. metre-gauge line from Cawnpore to Agra). A branch line of the E.I. Ry. also connects Bareilly, *viâ* Chandausi, with Aligarh (p. 435).

By road Bareilly is 63 m. to Kathgodam, 47 m. to Shahjahanpur, 52 m. on to Sitapur, and 52 m. farther on to Lucknow; it is 33½ m. to Pilibhit, 128 m. to Muttra, 132 m. to Agra. Petrol can be obtained at N.I. Motor Cycle Agency, and also in Cantonments. Accumulators can be charged at the R. and K. Railway Electric Power-house, near the city station, or occasionally in the daytime, at the Cantonment Electric Light Station.

The city of Bareilly is the capital of the country of Rohilkhand. Ali Muhammad Khan, the first Chief who united the Rohillas under him, between 1707 and 1720, made Bareilly

his headquarters, and Hafiz Rahmat Khan (about 1710-1774), who ultimately succeeded him, extended his power from Almora in the N. to Etawa in the S.W. The Rohillas, who were no whit less turbulent than the other fighting elements in India at that period, and who took a prominent share in the dismemberment of the Mughal Empire, ultimately provoked an invasion of the Mahrattas, and to buy them off executed a promise to pay an indemnity of 40 lakhs, for which the Nawab Wazir of Oudh stood surety. As the Rohillas refused to pay on demand, these transactions led to the Rohilla War, 1772-4, in which the ruler of Oudh, with the support of British troops, conquered Rohilkhand, Hafiz Rahmat being killed fighting valiantly at Miranpur Katra on the 23rd April 1774.¹ Faiz Ullah, son of Ali Muhammad Khan, succeeded to the Chiefship of the Rohillas, and from him the present Chief of the Rampur State is descended. Bareilly passed to the British by cession in 1801. In 1816 an insurrection broke out in consequence of the imposition of a new tax on houses, and was suppressed only with the loss of several hundred men killed and wounded.

On the outbreak of the Mutiny in 1857 there were no British troops at Bareilly, the garrison consisting of the 18th and 68th Bengal Infantry, the 8th Irregular Cavalry, and one Battery. These revolted on 31st May, shortly after the arrival of fugitives from Ferozepore (p. 354), and the Europeans in the station were obliged to fly for their lives, after a certain number, including the Brigadier-General, had been murdered; the few who remained in the place were afterwards mas-

¹ The true narrative of the Rohilla War, which formed one of the articles of impeachment against Warren Hastings, may be read in Sir John Strachey's *Hastings and the Rohilla War* (Clarendon Press, 1892).

sacred by the order of Khan Bahadur Khan, grandson of Hafiz Rahmat Khan, who had been proclaimed Viceroy of Rohilkhand for the King of Delhi. From Bareilly four attempts were made on Naini Tal, but they all failed. The English under Sir Colin Campbell retook Bareilly on 7th May 1858, when all the insurgent leaders fled with Khan Bahadur Khan into Oudh. In 1871 the peace of the city was again disturbed by serious religious riots, and since then religious differences have occasionally threatened to develop into actual fighting.

Bareilly contains some fine bazars and mosques; of the latter only one, the Mirzai, dates back to Shah Jahan. The place is famous for its splendid rows of Bamboos, from which it is commonly called *Bans Bareilly*; practically all, however, have now disappeared. In the churchyard of the station church is the tomb of Mr Thomason, Lieutenant-Governor of the North-West Provinces, 1843-53, to whom, perhaps, more than to any one else, the present systems of land revenue and administration of N. India are due. A British infantry battalion, a battery of artillery, and an Indian infantry regiment are now quartered in the Cantonment. Bareilly is the hqrs. of the 8th Infantry Brigade.

(2) *Bareilly Jn. to Bhojpur (for Sitapur) and Kathgodam (for Naini Tal).*

11 m. from Bareilly Jn., on the R. and K. Ry., is **Bhojpur** junction for Kathgodam (see below). The main R.K. line runs from here to 36 m. Pilibhit, 115 m. Lakhimpur, 143 m. Sitapur, and 198 m. Lucknow.

A branch line runs from **Pilibhit** to, 33 m., Tanakpur on the Nepalese frontier. At Banbassa, 33 m. from Pilibhit, are the head works of the Sarda irrigation scheme.

A barrage of thirty-four bays, each of 50-ft. span, has been built across the river of that name. The scheme comprises about 4000 m. of canal and distributing channels, and will irrigate in a dry year over 1,500,000 acres. The works have taken eight years to complete, at a cost of £7,126,000, and were opened on 11th December 1928.

Sitapur (D.B.) is a small military station, with a Motor Transport School. Good roads to Lucknow, Shahjahanpur and Lakhimpur (Kheri Dt.). One of the saddest incidents of 1857 occurred in connection with the Europeans at Sitapur, where the troops mutinied on 3rd June. Those who escaped suffered the extremity of distress for four months at one time in the jungles, at another in the custody of false friends; and the few who remained were ultimately sent to the **Kaisarbagh** in Lucknow (p. 463). Of the whole number only one child, smuggled into the **Alambagh** by a trusty Indian, and two ladies were finally saved. The rest were murdered.

64 m. from Bareilly is **Kathgodam** (R.) terminus station. * By road it is 63 m. from Bareilly to Kathgodam; and on to Naini Tal the distance is 21 m. Motor services from Kathgodam to Naini Tal, and thence to Ranikhet and Almora. The country is flat for 2 m. as far as **Ranibagh** (D.B.). The road then ascends the valley of the **Balaya**, amidst picturesque scenery, with waterfalls flowing down deep ravines, to (12 m.) **The Brewery**. From here Naini Tal may be reached by a steep bridle-path. About 1 m. below **The Brewery**, however, a motor road takes off on the left, reaching Naini Tal in 10 m.

Naini Tal, * (D.B.) is a favourite sanatorium of the United Provinces, the summer residence

of the Governor, and the hdqrs. of the General Officer commanding the Eastern Command. It is extremely picturesque, the lake forming a most striking feature; but for travellers with a limited time at their disposal it does not possess the attractions of Darjeeling or Simla. The highest peaks are to the N.W.—China is 8568 ft. above sea-level, and Deopatta, 7589 ft.

The *Lake* is nearly 1 m. long and 400 yds. broad, with an area of 120 acres. The flood-level is 6410 ft. above the sea. The depth ranges from 5 fathoms at the N. end to $15\frac{1}{2}$ in the broadest part; and there are *Sulphur Springs* at the end near the Convalescent Depot.

The principal residences lie to the N.W. of the lake, where, close to the shore, are the *Assembly Rooms* with *Library*, and the *Masonic Hall*, the *Club* about $\frac{1}{2}$ m. farther, the *Post Office* lying on the way, and some *European shops*. Polo, cricket, football and hockey are played on the "Flats" opposite the Assembly Rooms. There are numerous *Educational Institutions*.

The *Church of St John in the Wilderness*, $\frac{1}{4}$ m. beyond the Club, is built of stone. It has a roof of dark-coloured wood, and has two stained-glass windows. There is a handsome brass under the window on the N. side of the communion-table, in memory of Cudbert Bensley Thornhill, C.S.I.

On 18th September 1880 a sad catastrophe occurred at Naini Tal. On Thursday, the 16th, rain fell in torrents, and continued during Friday and Saturday, by which time 33 in. had fallen in the twenty-four hours. The Victoria Hotel, which stood about 280 yds. to the N. of the N. corner of the lake, had a lofty hill at its back. At ten o'clock on the morning of Saturday, the 18th, a slight landslide occurred on the spur of the hill, crushing in the outhouses and

a portion of the rear of the premises, and burying several Indians and one European child. The Assistant-Commissioner, Mr Leonard Taylor, with some police and labourers, came at once to render assistance, and sent for the military, who hastened to the spot under the command of Captain Balderstone. The work of extricating the dead and wounded went on till 1.30 P.M., when in a moment the whole precipitous cliff overhanging the spot fell with a tremendous roar, burying at once the hotel, the soldiers, the assembly rooms, library, orderly room, road, and garden. Almost every person in the buildings and grounds was entombed, and it was utterly impossible to extricate any of them.

There is a pretty ride on the W. side of the lake, where the visitor may ascend to a considerable height. But the finest views will be obtained on the E. side—e.g., from Sher ka Danda, whence the snowy mountains beyond Almora and Ranikhet may be seen.

An excursion may also be made by a very pretty road from Naini Tal to **Bhim Tal**, 12 m. (bungalow and fishing), to **Naukuchia Tal**, 2 or 3 m. from Bhim Tal (camping-ground and fishing), and to **Malwa Tal**, 10 m. from Bhim Tal over the hills, a very pretty lake (bungalow; fishing and good shooting procurable). From Bhim Tal it is possible to return direct to **Kathgodam** (7 m.).

The stages on the round route to **Ranikhet** and **Almora** are as below: the direct route from Kathgodam to these places is by Bhim Tal. There is a good cart-road from Naini Tal to Ranikhet and Almora, but not from Almora direct to Naini Tal. Pony from Kathgodam direct to Ranikhet (36 m.) or Almora (33 m.) Rs. 10.

The distances by cart-road are : Naini Tal N. to Ranikhet, 36 m. ; Ranikhet E. to Almora, 29 m. ; Ranikhet S.W. to Ramnagar, 61 m. These roads can all be used by motors, except the last-named, on which 7 m. of the 61 m. are unfit ; but some of the bends are sharp. The ruling gradient is 1 in 20, but is sometimes steeper.

Nos.	Names of Stages.	Miles from Stage to Stage.
1	From Naini Tal to Khairna D.B.	12
2	From Khairna to Ranikhet D.B.	15
3	From Ranikhet to Majhkali D.B.	8
4	From Majhkali to Almora D.B.	16
5	From Almora to Peora D.B.	10
6	From Peora to Ramgarh D.B.	10
7	From Ramgarh to Naini Tal	13
	Total . .	84

At **Khairna**, on the Kosi River, is mahsir fishing, also gooral shooting, and a few leopards in the hills. From Khairna to Almora by the river is rough going.

Ranikhet (D.B.), with Chaudhatta, an important military hill station. Pop. 3632. Elevation 6000-7000 ft. The views of the Himalaya snows from this station are very grand.

Almora, * (D.B.), the chief town of the Almora District, 5500 ft. above sea-level ; pop. 8359. There was much severe fighting round Almora in the Gurkha War of 1815. The place is now a station for a battalion of Gurkhas. It is also resorted to by persons with weak lungs. The views of the snows are fine. In the neighbourhood are the *Jalna* and *Binsar* fruit orchards.

Almora to *Pindari Glacier*

(13,000 ft.), six marches (D.B. on the way, but no supplies or attendance). Best time of year, May or early October. (See *Tour to the Pindari Glacier*, by Major St John Gore ; and *Guide to the Pindari Glacier*, by C W. Anderson.) Travellers should make arrangements with the Dy-Commissioner, Almora, for conveyance and coolies.

Main Line from Bareilly Jn. to Lucknow and Mughalsarai.

220 m. from Saharanpur is **Shahjahanpur** junction (D.B., $\frac{1}{2}$ m., in Cantonment). Railways (1) to Pilibhit, 54 m. on the Rohilkhand-Kumaun line, and (2) to Sitapur, 56 m. on the O. and R. Section of the E.I. Ry. Motor-bus service to Pawayan, 17 m. N.E. Fatehgarh is 48 m., S.W., by road. Shahjahanpur is the chief town of a District, with civil station and formerly a military Cantonment (pop. City, 68,782 ; Cant. 3834). The Cantonment is now occupied by the Army Clothing Factory and headquarters of the Department. The station contains an English church and three churches belonging to the American Methodist Mission, which also supports several schools. The principal local manufacture is sugar. The Rosa Sugar factory and rum distillery is situated on the Garra River, a few m. from the city, with which it is connected by railway. Excellent silk cloth is produced in the city. Good duck shooting in the Shahjahanpur district ; the forests in the N. are full of spotted deer.

In 1857 the Europeans at the station were attacked by mutineers while at morning service on 31st May, but managed to defend themselves in the church with the aid of some faithful sepoys, and to fall back on Muhamdi, in Oudh, where, however, they were all murdered shortly afterwards.

260 m. **Hardoi** station (R., D.B.). Good duck-shooting in winter months in Hardoi Dt.

322 m. **LUCKNOW** junction station (R.) (Route 22). Branch, 45 m. to Cawnpore (p. 438) on the E.I.R. main line from Delhi.

From Lucknow two lines run to Benares; the direct route (187 m.) by Rae Bareilly, which is 370 m. from Saharanpur, and Partabgarh, which is 429 m. from Saharanpur; and the older and longer (209 m.), by Fyzabad, 79 m. from Lucknow, and Jaunpur, 163 m.

(a) On the former route, which is taken by the Peshawar-Calcutta mail of the E.I. Ry.

371 m. from Saharanpur, and 49 m. from Lucknow is **Rae Bareilly**, junction for a branch, 76 m. to Allahabad. Rae Bareilly is the headquarters of the Oudh district of that name, which comes from the once important tribe of Bhars. It contains an old fort of Ibrahim Sharki.

430 m. from Saharanpur, **Partabgarh**, also the headquarters of a district. The E.I. Ry. line, 88 m., from Fyzabad Jn. through Sultanpur to Allahabad Jn., runs through Partabgarh.

463 m. **Janghai**, jn. with the branch line from Jaunpur (p. 431) to Allahabad.

(b) By the second route, which is taken by the Howrah-Dehra Dun express,

17 m. from Lucknow is **Bara Banki** Jn. The B. and N.W. Ry. branch (metre-gauge) from Lucknow (Aishbagh), which has been running alongside, here diverges to (22 m.) **Chaukaghat** on the Gogra. From Gonda, 31 m. beyond the Gogra, two branches turn N., one to (38 m.) **Bahraich**, Nanpara (branch for Katarnian Ghat) and Naipalganj Rd., and another branch to 24 m. **Balrampur**, 93 m. **Uska Bazar**, and

Gorakhpur, 136 m. (p. 475). A branch line from Chaukaghat passes through Tahsil Fatehpur (18 m.) to Sitapur junction (64 m.) on the O. and R.R. and R. and K.R. **Bahraich** is famous for the tomb shrine of Syad Salar Masud, nephew of the great Mahmud of Ghazni, who was killed here in 1033 A.D. The shrine is about a mile N. from the ry. station and about 2 m. from the town. Improvements in the buildings have made the place more attractive to visitors. The ruins of **Saheth Maheth**, on the borders of the Bahraich and Gonda Districts, mark the site of the ancient city of Sravasti and the famous Buddhist convent of the Jetavana, where the Buddha is said to have lived and preached for twenty-five years. The antiquities excavated are now preserved in the Lucknow Museum. The place can best be visited by riding an elephant from **Balrampur**, which is the residence of the leading talukdar of Oudh. Maharaja Sir Drigbijai Singh, K.C.S.I., the grandfather of the present Maharaja, was one of the five loyal talukdars during the Mutiny and received large additions to his estates as a reward for his services.

80 m. from Lucknow is **Fyzabad** junction station (R., D.B.). Connection is made with Partabgarh, on the main line, by a branch running through to Allahabad.

Fyzabad (pop. with Ajodhya, 51,342) is the headquarters of a District and of a Division. Once the capital of Oudh, the city has fallen into decay since the death, in 1816, of Bahu Begam, who resided here for many years. The first Nawab of Oudh, S'aadat Khan (1724-1739), seldom resided at Fyzabad, though it was his nominal capital; so also his successor, Safdar Jang (1739-53); but Shuja-ud-daula (1753-75), who succeeded, took

up his permanent residence there. When defeated at Buxar he fled to Fyzabad, and constructed the lofty entrenchment whose ramparts of rammed clay still frown over the Gogra. At his death, in 1775, his widow, the Bahu Begam, remained at Fyzabad, while Asaf-ud-daula, the then Nawab, removed to Lucknow. The city is bounded to the N. by the Gogra River, which here divides into two streams, both crossed by pontoon bridges. The **Cantonment**, which is occupied by a British infantry battalion, a battery of artillery, and an Indian infantry regiment, lies to the N.W. of the Indian city, at the S.W. corner of which the railway to Benares passes. The **Mausoleum of the Bahu Begam**, wife of Shuja-ud-daula, Nawab of Oudh, and mother of Asaf-ud-daula, is the finest mausoleum in the Province of Oudh and its neighbourhood. The cenotaph is of marble, without inscription. The total height may be taken at 140 ft. There is a very fine view from the top. This lady was one of the two Begams of Oudh whose alleged ill-treatment formed a subject of indictment of Warren Hastings on which Burke and Sheridan wasted much misplaced oratory. As a matter of fact, although Asaf-ud-daula and the British officials acting with him did put considerable pressure on the servants of the two Begams (of whom the mother of Shuja-ud-daula was known as the Mani Begam) to compel them to disclose where the State money of which the ladies had possessed themselves was hid, the ladies themselves were left untouched. It may be added that they wrote letters of condolence to Warren Hastings on his trial! The **Mausoleum of Shuja-ud-daula** (known as the Gulab Bari) is close by, and is something like the Begam's, but not nearly so grand or imposing. At each of the four corners of the building are an

oblong and a square reservoir. In the centre space on the ground floor are three tombstones without inscription. The middle slab is that of Shuja-ud-daula. His mother's is to the W., and that of his father, Mansur 'Ali, to the E. In the W. side of the enclosure is a mosque at the N. end, with an Imambara on the S. The Civil Station, Cantonments and environs are beautifully wooded with innumerable tamarind, mango, and other trees.

The **Guptar Park** is prettily laid out; at the S. end of it is a temple where Rama is said to have disappeared.

By road Fyzabad is 79 m. to Gorakhpur, 29 m. to Gonda, 38 m. to Utraula. Petrol obtainable from Messrs Abdul Samad & Co.; also from Messrs Singh & Co., on the main road to Ajodhya.

86 m. **Ajodhya station** (Sanskrit *Ayodhya*), on the banks of the Gogra, is the place where the great Ram Chandra once reigned, and ranks as one of the seven sacred Hindu shrines. The ancient city is said to have covered an area of 48 kos, or 96 m., and to have been the capital of Koshala, the country of the Solar race of Kings, of whom Manu was the first. A copper grant of Jai Chand, the last of the Kanauj Rathors, dated 1187 A.D., was discovered near Fyzabad. The Chinese traveller Hiuen Tsang found at Ajodhya twenty Buddhist monasteries with 3000 monks. According to him, the celebrated Toothbrush-tree of Buddha grew here.

The road from Fyzabad Cantonment to Ajodhya (4 m.) is excellent, and it may be found more convenient than the railway. On entering Ajodhya the **Janam Sthan Temple** will be found on the left. In the sanctum, the door of which has a silver frame, are images of Sita and Rama. Rama

has a gleaming jewel of large size, which looks like a light-coloured sapphire. The temple is an oblong of about 200 ft. by 150 ft. The walls are 45 ft. high, and seem strong enough for a fortress; which justifies its name of *Hanuman Garhi* ("Hanuman's Fortress"). The neighbouring trees swarm with grey monkeys.

To the N.W. is the temple of *Kanak Bhawan*, or *Sone Ka Garh*, with images of Sita and Rama crowned with gold, whence the name "Hall of Gold." This is said to be the oldest temple of all.

The *Janam Sthan*, or place where Ram Chandra was born, is $\frac{1}{4}$ m. W. of the Hanuman Garhi; it is a plain masonry platform, just outside a temple, but within the enclosure on the left-hand side. The primeval temple perished, but was rebuilt, and was converted by Babar into a mosque. Europeans are expected to take off their shoes if they enter the building, which is quite plain, with the exception of twelve black pillars taken from the old temple. On the pillar on the left of the door on entering may be seen the remains of a figure.

At about $\frac{1}{4}$ m. to the N. of Janam Sthan is *Swarga Dwara*, or Ram Ghat, where Rama was cremated. S.W. is *Lakshman's Ghat*, where Lakshman, the half-brother of Rama, used to bathe. 1 m. to the S. of Hanuman Garhi is the *Mani Parbat*, and to its S. again are the *Kuver Parbat* and *Sugriv Parbat*, mounds of great antiquity. The *Mani Parbat* Hill is 65 ft. high, and is covered with broken bricks and blocks of masonry. The bricks are 11 in. square and 3 in. thick. At 46 ft. above the ground, on the W. side, are the remains of a curved wall faced with *kankar* blocks. General Cunningham supposes that the great monastery described by

Hiuen Tsang is the *Sugriv Parbat*, which is 560 ft. long by 300 ft. broad, and that the *Mani Parbat* is the Stupa of Asoka, built on the spot where Buddha preached the law during his six years' residence at Saketa.

Ajodhya is connected with Lakarmandi Ghat (station on B. and N.W. R.) by steamer service in the rains and a pontoon bridge at other times.

165 m. from Lucknow is **JAUNPUR City** (R., D.B. 2 m. from E.I.R. Ry. Stn.). There are two stations—the E.I. Ry. and the B. and N.W. Ry.—at Jaunpur: the Civil Lines, or Zafarabad station, is 4 m. farther on. Branch lines run: (1) on the E.I.R., 71 m. to Allahabad (jn. at Janghai, 34 m. for the main line from Partabgarh to Benares); (2) on the B. and N.W. Ry. line to, 37 m., Aunrihar and thence to *Ghazipur* and Bihar. By road Jaunpur is 36 m. from Benares, 57 m. from Allahabad, 44 m. from Mirzapur station. The town is celebrated for the manufacture of perfumes.

Jaunpur¹ (pop. 32,569), named after Juna Khan, known as Muhammad bin Tughlak (1325-51), and founded by Firoz Shah Tughlak in 1360 (p. 290), is a place of much interest. It was the capital of an independent Muhammadan kingdom (the Sharki, or Eastern, dynasty) from 1397-1478, and retained a partial independence until finally conquered by Akbar in 1559. Zafarabad is so called after a son of Ghiasu-d-Din Tughlak. Vast Hindu temples and Buddhist monasteries stood at Jaunpur near the Gumti; there are many little tombs and shrines, in which, says Fergusson (i, 228), the Muslims have used up Hindu and Jain pillars.

¹ For the architecture of Jaunpur a volume published by Messrs Führer and Smith of the Archaeological Survey of India, entitled the *Sharki Architecture of Jaunpur*. (Trübner), may be consulted, and Fergusson's *Indian Architecture*, 2, 222.

For a brief visit to Jaunpur, drive from the railway stn. over the stone bridge; then turn to the right, keeping the Fort on the right, until the Fort gate is reached. From the Fort can be seen the Atala and Jami Masjids to the N.W. and the bridge to the W. The Jhanjhari (Chachakpur) Masjid, which is on the E., is concealed by trees and is approached by a footpath from the city. From the Fort the Atala Masjid is reached by a road leading straight from the Fort gate and turning to the left after a short distance; thence past the Town Hall is the Jami Masjid in a turning to the left of the Fyzabad road. Some way beyond the Jami Masjid is the Lal Darwaza Masjid, which is a replica on a smaller scale. Two hours will suffice for seeing the Fort and the Atala and Jami Masjids.

The massive stone **Bridge**, 654 ft. long, over the Gumti, consists of ten spans, besides those standing on the land, the middle group of four being larger than the three at each end. It was designed by Afzal 'Ali, a Kabuli architect, at the expense of Munim Khan, one of Akbar's high officers, and formerly his guardian. It was commenced in 1564 and completed in 1568, and is said to have cost £300,000. The bridge has suffered frequently from floods, notably in 1774 and 1871. After 1887 the pavilions surmounting the piers were restored. At a market-place at the S. end of the bridge is a stone **lion** somewhat larger than life, which was found in the fort. Under it is a young elephant, which it is supposed to have seized. From this all distances in the city and province were calculated.

Near the bridge on the left bank is the **Fort** (built in 1360 A.D.) of Firoz, containing the Fort Masjid, almost entirely constructed from ruined temples. The entrance

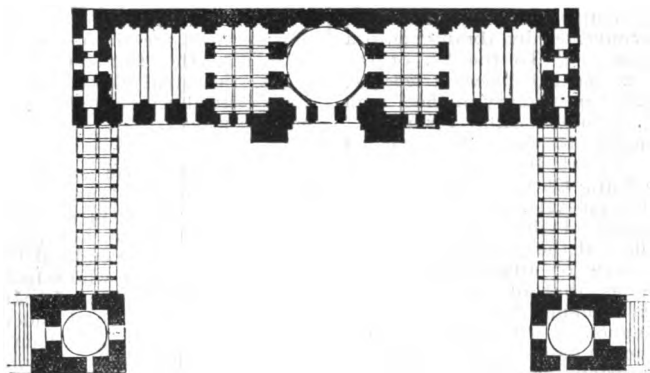
gate, 47 ft. high, constructed by Munim Khan, is covered with *kashani hak*, a sort of blue and yellow enamelled bricks, of which beautiful portions remain. The inner gate has many stones of Hindu temples built into the walls, on some of which is carved a bell. At 200 ft. from this gate is a low mosque, 130 ft. by 22 ft., divided into three chambers by lateral walls, with a reservoir in front, and a remarkable lat, or *minar*, apparently unaltered since its erection. An inscription on the mosque records its erection in 1376 by Ibrahim Naib Barbak, brother of Firoz Shah Tughlak. The river-face of the Fort is 300 ft. beyond this pillar. It is 150 ft. in perpendicular height, and commands a noble view of the country and city. Before reaching it a round tower, called the magazine, will be noticed, with a *hammam*, or bath, on the left.

Some 400 yds. to the N. of the bridge and fort, and not far from the *Post Office* and *Town Hall*, is the N. entrance of the **Atala Masjid**, erected in 1408 on the site of an old Hindu temple dedicated to the goddess Atala Devi, which was destroyed in 1364, when Khwaja Kamal Khan commenced to build the mosque from the temple materials, the Sultan Ibrahim (1401-40) completing the work. On the principal *mihrab* ("arch"), built of black marble, immediately in the centre of the main W. wall of the Masjid proper, in which the prayers are said, is a verse from the Koran, and above it the creed. The façade is 75 ft. high. Almost in the centre of the large courtyard, and to the N.E. of the *musallah*, or praying-ground, is a well with a fine citron-leaved Indian fig-tree (*Ficus venosa*). At the S.W. corner of the large square is a chamber screened by a lattice of stone, intended for the women. Leading from it to the roof is a staircase. Behind the

propylon, screening the dome from the courtyard and surrounding three sides of the drum of the dome, is a chamber some 11 ft. high and 6 ft. wide. Munshi Haidar Husain of Jaunpur restored the façade in 1860.

$\frac{1}{4}$ m. N.W. of the Atala mosque, raised on a platform some 20 ft. in height, is the splendid **Jami Masjid**, built by Sultan Hasan (1452-78).¹ It was commenced by Shah Ibrahim 1438, and finished after 1478. Some attribute the design to Ibrahim, as his family are said to lie in the

by domes. In the cloisters and walls many stones from Hindu temples have been utilised. Its general arrangement resembles that of the Atala and the Lal Darwaza Mosque (see p. 434), and the façades are not unlike, although the cloisters here have three tiers, whilst those at the Atala have only two. The mosque proper is very massive, almost fort-like in construction. It measures 59 ft. by 235 ft., including the thickness of the walls but not the bastions at the angles. It is divided into five compartments on the ground floor, and above are



West half of Jami Masjid at Jaunpur.

cloistered court of a building adjoining the N. side of the Masjid. On entering the S. gate an inscription (upside down) in Sanskrit, of the 8th century, will be seen on one of the outer voussoirs of the exterior arch; another in Tughra characters over the top of the central *mihrab*; and a third in Arabic characters around the outer margin of the arch. The N., S., and E. sides are in a dilapidated condition, and were probably destroyed by Sikandar Lodi. The N. and S. entrance-gates have been restored, and are surmounted

two zenana chambers, one on each side of the grand dome, with splendid stone carved ceilings. On the E. side is an immense propylon 80 ft. high, divided by string courses into five storeys.

N. of the mosque is the burial-ground of the **Sharki Kings**, the walls of which approach the N. wall of the mosque within 30 ft. In the quadrangle is the tomb of one *Ghulam Ali*, with a fine Persian inscription. In the centre, beyond this tomb, is reputed to be that of *Sultan Ibrahim Shah*. The only inscription is on a round stone in the centre, which contains the *Kalima*.

¹ This King was conquered by Sultan Bahlol Lodi, of Delhi, but was allowed to remain in Jaunpur.

Next to the supposed tomb of Ibrahim is said to be that of his grandson, Sultan Hasan Shah.

Besides those already mentioned, six other mosques deserve visiting: (1) The Charungli, or **Mosque of Malik Khalis Mukhlis**, built on the site of the favourite temple of Vijaya Chandra, which was broken down by Malik Khalis and Malik Mukhlis, by order of Sultan Ibrahim. In one of the pillars is a black stone, still worshipped by the Hindus. (2) **Chachakpur Mosque**, called **Jhanjhari Masjid** on account of the "screen-like" appearance of its ornamentation, was a temple built by Jai Chandra, and converted by Ibrahim into a mosque. (3) To the W. of the city is the **Lal Darwaza Mosque**, so called in memory of the "high gate painted with vermilion" belonging to the palace erected close by at the same time by Bibi Raji, Queen of Sultan Mahmud (1440-52), and destroyed by Sikandar Lodi. This is the smallest of the Jaunpur mosques. The style of architecture is the same as that of the Jami and Atala Masjids, but the building throughout is on a less massive and much lighter scale. The date is uncertain, though probably the cloisters of the court were erected about 1447. On the N., S., and E. sides of the court are massive gate entrances. The cloisters are two bays deep, and the W. walls, as well as the cloisters, are panelled. The columns deserve study on account of their variety. The propylon, the principal feature of the building, standing in the centre of the W. façade, is 48 ft. 6 in. high, and is wider at the base than the top. The towers contain staircases leading to a mezzanine floor on each side of the dome. The principal mihrab is of black stone. On the top of the architrave is an Arabic inscription. (4) **Mosque of Nawab Muhsin Khan**. Sukh Mandil, who was the Diwan

of Khan Zaman Khan, had built a temple where this mosque stands. When Khan Zaman was killed the building came into the hands of Muhsin Khan, one of Akbar's courtiers, who destroyed the temple and built a mosque. (5) The **Mosque of Shah Kabir**, built by Baba Beg Jalagur, Governor of Jaunpur in Akbar's reign, in 1567, in honour of the saint Shah Kabir. (6) The **'Idgah Mosque**, built by Sultan Hasan, and repaired in Akbar's reign by Munim Khan. Afterwards it fell into a ruinous state, and was deserted till restored by Mr Welland.

The chief features of the Jaunpur mosques are the use of Jain materials, the two-storeyed arcades, the great gates, and the large central screen arches of the mosque proper.

169 m. **Zafarabad** station for the Civil Lines of Jaunpur. The **Church** (Holy Trinity) contains a tablet to Manaton Collingwood Ommaney, B.C.S., Judicial Commissioner of Oudh, who rebuilt it in 1852, and died at Lucknow during the siege of the Residency. A few officers were killed on the outbreak of the Mutiny at Jaunpur in 1857, but the majority of the Europeans escaped safely to Benares.

The mosque of Shaikh Barha, in Zafarabad, composed wholly of Jain materials, is the oldest at Jaunpur.

509 m. from Saharanpur by Rae Bareilly and 187 m. from Lucknow by the Fyzabad loop is **Benares Cantonment** station (see Route 5).

520 m. **Mughalsarai** junction station, with the E.I. Ry. main line (see p. 54). From Mughalsarai the Peshawar mail proceeds to **Calcutta** (Howrah) *via* Arrah and Patna (Route 2).

ROUTE 21.

DELHI to ALLAHABAD on the E.I. Railway by **Ghaziabad**, **Aligarh**, **Hathras Junction**, **Tundla Junction**, **Etawa**, and **CAWNPORE**, and Cawnpore to **LUCKNOW**.

From Delhi the Delhi-Calcutta mail of the E. Indian Railway runs to

12 m. **Ghaziabad** junction station (see p. 336).

78 m. **ALIGARH** junction station (R., D.B., between the Civil Station and the city). A line from here runs N.E. to (61 m.) Chandausi and to (101 m.) Bareilly, on the Oudh and Rohilkhand main line. Aligarh is 825 m. from Calcutta, 904 m. from Bombay; by road 81 m. to Meerut, 45 m. to Etah, 46 m. to Muttra (*vid* Hathras), 35 m. to Anupshahr. For motor supplies, see Index.

Aligarh, "the high fort," is the name of the considerable fortress which adjoins and protects the town of Koil, situated in the well-cultivated plain between the Jumna and Ganges. This town (67,776 inhabitants) is of undoubtedly great antiquity, and Buddhist remains have been found in excavating the eminence on which the citadel of Koil stood, which was in earliest times a noted Rajput stronghold. Kutb-ud-din Aibak marched from Delhi to Koil, "one of the most celebrated fortresses of Hind," in 1194. In 1252 A.D. Ghias-ud-din Balban was governor of Koil. He set up a great minaret, which was inscribed with the name which he had before he ascended the throne—"Baha-ud-din Shamsi," and dated 1254 A.D. In 1862 this pillar, by an extraordinary act of vandalism, was pulled down.

Ibn Batuta mentions Koil in his account of his embassy from Delhi to China, 1342 A.D. He calls it a fine town surrounded by mango groves. In the 15th century it became the scene of many a battle between the armies of Jaunpur and Delhi. An inscription in the fort of Koil records its construction during the reign of Ibrahim Lodi, 1524 A.D. After the death of Aurangzeb (1707) Koil was considered by the Mahrattas, Jats, Afghans, Rohillas, and other factions to be of great strategical importance as commanding a number of main roads, so that the Aligarh district became the battlefield of rival armies. In 1759 A.D. the Afghans, under Ahmad Shah, drove out the Jats from Koil, and about 1776 A.D. Najaf Khan (who expelled the Jats from Agra in 1774) repaired the fort of Ramgarh and changed its name to Aligarh. In 1784 Maharaja Scindia captured Aligarh, in which he found treasure in specie and jewels amounting to a crore of rupees. In 1788 it was taken by Ghulam Kadir Khan (the Rohilla free-booter who blinded the Emperor Shah Alam in 1788), and retaken by Scindia, who, with the aid of De Boigne, organised his battalions after the European fashion, the fort being made almost impregnable. In 1796 De Boigne was succeeded by Perron, who, when the British declared war against Scindia in 1803, took refuge with the British. Aligarh was then taken (29th August 1803) by a brilliant *coup de main* by Lord Lake, when 281 guns were captured.

When the news of the mutiny at Meerut arrived, on the 12th of May, Aligarh was garrisoned by 300 sepoy of the 9th Bengal Infantry, who mutinied on the 19th. Among those who were compelled to seek refuge in Agra was Lady Outram, who was living with her son, the late Sir Francis Outram, a recently-joined member of the Civil Service. On the 26th

Lieutenant Cockburn reached Aligarh with a detachment of troopers, who held their ground there up to the 21st of June; but were soon after obliged to retire to Agra. On the 5th of October Colonel Greathed's column from Delhi occupied Koil.

The **Civil Station** of Aligarh lies N.E. of the city, from which it is separated by the railway. It includes the old Cantonment, which was abolished in 1869. It is well planted with trees, and has a large *maidan*, the old parade ground, in the centre.

The principal thoroughfares are the Anupshahr Road, which runs from the overhead railway bridge past the W. side of the *maidan* and the road from the railway station which ultimately joins the Anupshahr Road beyond the College.

On the left of the Anupshahr Road lie the District School, the Judges' Courts, a fine new building, a cemetery, Jail, and the District Office and Courts. Opposite the Judges' Courts is the Cattle Garden, containing the Crosthwaite Hall, which is used for Municipal and District Board meetings, and the Harrison Clock Tower, named after a former Collector of Aligarh. From the Postal Workshop all the requirements of the post offices in India, such as bags, forms, dies, etc., are supplied. Probably from the impetus given by these works a considerable number of metal works have sprung up, especially lock works. The *Lyall Library* was founded by the Hindus of Aligarh, and is built in the modern Saracenic style. The old cemetery of 1802 lies towards the fort.

The object of chief interest is the Muhammadan **Anglo-Oriental College**, which was founded by the late Sir Saiyad Ahmad Khan, K.C.S.I., LL.D., for the education of Muhammadans of India. The buildings are on the plan of the Oxford and Cambridge Universi-

ties, and are surrounded by very extensive grounds. The College was opened in 1875, and has since made rapid progress. It was raised to the status of the Muslim University in 1920. There are three Institutions: the University proper, the Intermediate College and the Muslim University School. The staff exceeds 100. The University receives annually one lakh from the Govt. of India, half-lakh from the Provincial Govt. and contributions from several Indian States, including Rs.36,000 from Hyderabad. The control is in the hands of a University Court, an Executive Council and an Academic Council. The special feature is the religious instruction. Considerable prominence is given to the encouragement of manly sports. The students of all three Institutions exceed 1600; and come from all parts of India and Burma, and some even from Persia, Egypt and Mesopotamia.

The *Fort of Aligarh*, 2 m. N. of the town, was built in 1524, and reconstructed by French engineers under De Boigne and Perron in the 18th century, and was further improved after its occupation by the British. It is surrounded by a ditch 18 ft. deep and from 80 ft. to 100 ft. wide. The main entrance is on the N. There is no garrison now. General Perron's House is $\frac{1}{2}$ m. to the S. of the fort, between it and the College, of which it now forms a part. It has a square gateway in front, with an arched entrance and a guard-room above it. In the garden is a well with a Persian inscription.

In the **City of Koil**, at the top of a long and rather steep slope, is the principal mosque, with three central domes, two side domes, and four minarets. It was built by Sabit Khan in 1728 during the reign of Muhammad Shah. The architecture is in the debased style of the 18th century; yet the mosque is by no means without

beauty and even dignity. The eminence on which it stands is called the Bala Kila, and in it have been discovered remains of Buddhist and Hindu temples, some of which have been placed in the compound of the Institute.

S.E. of the great mosque is the *Moti Masjid*, or "Pearl Mosque." In the city is a fine tank surrounded by small Hindu temples and shrouded by magnificent trees swarming with monkeys.

The Aligarh annual Fair (held early in February) usually offers special opportunity for witnessing the inner life of an Indian district.

97 m. Hathras junction station. The thriving town of Hathras (pop. 38,763) is 6 m. from the station. Petrol store. The Fort was one of the strongest in Upper India until 1817, when it was captured by Maj.-Gen. Marshall, after a short siege. During the Mutiny order was maintained by a blind pensioned Hindu official, who was subsequently murdered by the rebels at Kasganj. The E.I. Ry. is here crossed by the Cawnpore-Achnera-Agra Fort line of the B.B. and C.I. Ry. (Route 12). The branch from Hathras Road stn. to Cawnpore (189 m.) passes Kasganj (34 m.) jn. for the O. and R. Rly. line to Lucknow, Farrukhabad (101 m.), Fatehgarh, the headquarters of the Farrukhabad district (105 m.), and Kanauj (138 m.). The Europeans at **Fatehgarh** in 1857 defended themselves for some time after the outbreak of the Mutiny on 18th June, but were finally compelled to leave the Fort, which was in use as a gun-carriage factory, and attempted to escape to Cawnpore in boats. Most of them were killed on the way, and the few who reached Bithur (p. 445), and were captured there, were murdered on the 10th and 15th July with the survivors of Cawnpore. Others were brought back to Fatehgarh

and, after being kept in confinement for nearly three weeks, were shot or sabred on the parade-ground. A monument has been erected over the well into which the bodies were thrown, and there is a memorial church close by. **Kanauj**, the famous northern capital, first of the Tomar and then of the Rathor Rajputs, was taken by Mahmud of Ghazni in 1018, and by Shahab-ud-din Ghorî and Kutb-ud-din Aibak in 1194, whereupon the Rathors removed to Rajputana and finally settled at Jodhpur. The ruins of this great city which now remain are very scanty. It was at Kanauj, too, that the Emperor Humayun was finally and totally defeated by Sher Shah in 1540 A.D.

127 m. Tundla junction (R.). A line from here runs W. into *Agra*, distant 15 m. (Route 13). Visitors to Agra book to the Fort Station. Some of the E.I.R. trains run to this, and some diverge at the Jumna Bridge junction to Agra City, reached by the modern Strachey Bridge of nine spans of 154 ft. clear. As the bridge over the Jumna is approached a splendid view of the Taj and the fort on the opposite bank is obtained.

150 m. Shikohabad junction for line to (66 m.) Farrukhabad.

184 m. from Delhi is Etawah station * (R., D.B. $\frac{1}{2}$ m.), 720 m. from Calcutta; by road it is 72½ m. from Agra, 61 m. to Fatehgarh, 33 m. to Mainpuri, 66 m. to Gwalior (with State R.Hs. at intervals), and 120 m. to Cawnpore. Two petrol stores. Passenger motor lorries run daily to and from Mainpuri. Etawah (41,558 inhabitants), is the headquarters of the District of the same name, and is said to have been founded by a Chauhan Chief, descended from the famous Prithvi Raja, King of Delhi (p. 315). The name

is properly *Itawa*, and is popularly derived from *int* "a brick." Both town and District were captured by Kutb-ud-din Aibak in 1193, but the Chauhans regained their power and held it till the reduction of Etawah in 1392 by Muhammad bin Firoz, who destroyed the old Hindu fort. Successive punitive expeditions followed till 1432, and then for a time Etawah passed into the hands of the Sharki Sultans of Jaunpur, who built the extensive brick fort overlooking the Jumna. The rule of Delhi was restored in 1487 by Bahlol Lodi. Etawah rose to some importance under the Mughal Emperors, and then was held in succession by the Nawab of Farrukhabad, the Rohillas and the Mahrattas. In 1774 it again came under the Oudh Government, but the headquarters were removed from Etawah to Kudar-kot, 23 m. E., and the fort was dismantled. The district was ceded to the East India Company in 1801. In the Mutiny the civil officers were forced to retreat to Agra; but the District was soon regained by the Collector, Mr A. O. Hume, C.S., (the famous ornithologist and afterwards "Father of the Congress") who raised a local force and fought several important actions against the rebels.

The City stands picturesquely amongst a network of ravines on the N. bank of the Jumna, at a point where it bends sharply backwards on its own course. It is divided into two parts, a ravine from N.W. to S.E. separating the old city on the S. from the new. In the centre of the city is *Hume Ganj* Square, called after Mr Hume, and adjoining it is a *sarai* with a fine gateway. $\frac{1}{2}$ m. to the N. lies the *Civil Station*. 1. m. W. of the city lies the Fisher Forest, a fine example of afforestation of ravine land.

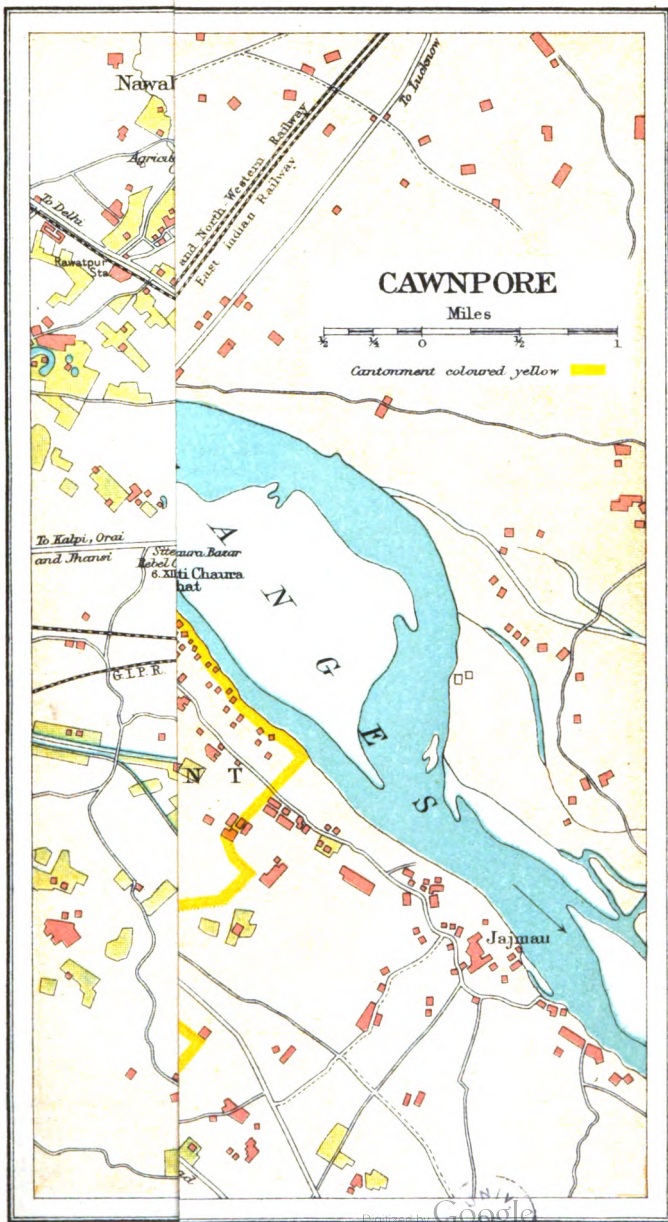
There are very few ancient buildings. The *Jami Masjid*, on high ground going toward the

Jumna, was built, possibly from old Hindu materials, by one of the Jaunpur kings. The screen, 47 ft. high, before the dome is similar to that of the Atala Masjid of Jaunpur (p. 431). The façade is 130 ft. long, but only 20 ft. deep.

The *Bathing Ghats* on the Jumna, below the ruined fort, are picturesque and worth a visit. From them is seen the white *spire* of a modern *Jain temple*.

270 m. from Delhi is **CAWNPORE** * junction station, 633 m. from Calcutta, 839 m. from Bombay; by road Cawnpore is 15 m. to Bithur, 49 m. to Lucknow, 70 m. to Orai, 136 m. to Jhansi, 40 m. to Hamirpur, 134 m. to Etah, 48 m. to Fatehpur, 119 m. to Allahabad, 190 m. to Jhansi *via* Hamirpur. Five railways meet here—E.I., B.B.C.I., G.I.P., Bengal and N.W., and the Oudh and Rohilkhand section of the E.I. Comfortable and convenient waiting-rooms.

The City (pop. 216,436) is situated on the right bank of the Ganges in lat. $26^{\circ} 28'$, long. $80^{\circ} 24'$; old Cawnpore is 2 m. to the N.W. of the present city. The name means City of Kanh, or Krishna. It is a great emporium for harness, shoes, and other leather-work, and the principal centre of the mill industry in N. India. Its modern history dates from its cession to the East India Company by the Nawab Wazir of Oudh. It is of no great antiquity, and owes its present importance as the industrial and commercial centre of N. India entirely to European enterprise. There are also a Government Experimental Farm and Agricultural College, worth seeing. The city, which has some fine bazars and markets, always presenting a scene of bustle, lies to the left (N.W.) of the Cantonment; while the Civil Station and most of the mills and factories lie N.W. again of the city and near the river. The tail of the Ganges Canal separates the S.E.



side of the city from the Sadr Bazar of the Cantonment, and the railway to Lucknow runs to the Ganges bridge outside the latter.

The chief interest of the place for Englishmen lies in the sad events of the Mutiny in June 1857,¹ which ended in the cowardly massacre of a large number of men, women and children. The English force in the Cantonment, which straggled for 6 m. or 7 m., consisted of a company of artillery, 60 men of H.M. 84th and 30 men of H.M. 32nd, who were joined just before the siege began by 15 men of the 1st Madras Fusiliers; and the total European population, including civilians and women and children, numbered not less than 950. The Sepoy troops were composed of three infantry regiments (the 1st, 53rd and 54th) and the 2nd Light Cavalry. At that time Dhundu Pant, known as the Nana Sahib,² the adopted son of Baji Rao II., the ex-Peshwa, whose claims to succeed to the large pension enjoyed by him had been rejected by the British Government, was living close by, at Bithur, on friendly terms with the English at Cawnpore.

Sir Hugh Wheeler, a gallant veteran commanding the Division, doubted the fidelity of the sepoys, and resolved to store with provisions one spot which should be a rallying point for those under his charge. The natural position to select was the Magazine in the N.W. corner of the civil lines which rested on the river, and was surrounded by strong walls. But General Wheeler decided against this, as he would have had to withdraw the sepoy guard, and feared that by showing his mistrust he would hasten the rising.

¹ For a graphic account of the siege of Cawnpore, the traveller cannot do better than study T. R. E. Holmes's *History of the Indian Mutiny* (Macmillan, 1904). See also *Cawnpore*, by Sir G. O. Trevelyan (Macmillan, 1907).

² The third Peshwa Balaji Baji Rao had been also known as the Nana Sahib.

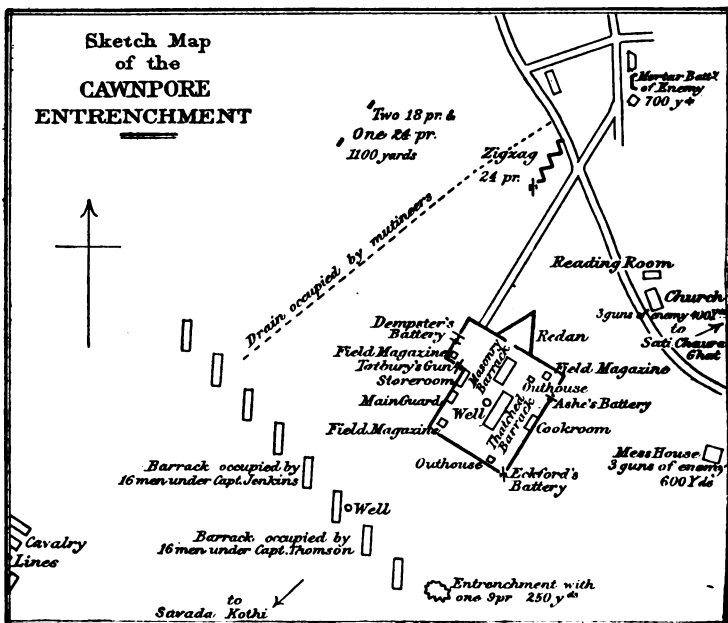
The spot he chose was the centre of a plain lying S. of the city, where there were two barracks. Here he raised some earthworks about 4 ft. high, and barely 2 ft. thick at the crest, the soil being so hard that it was almost impossible to dig it, and so friable that when dug it did not cohere; but it was supposed by Wheeler that the mutineers would at once proceed to Delhi, and that only temporary protection was needed from the city mob. He applied to Sir H. Lawrence for reinforcements, which were generously sent. Even now reliance was placed in the Nana. Much against the advice of others, the General and Mr Hillersdon, the Collector, asked him to send a body of his retainers for the defence of the Magazine and of the Treasury beyond it in Nawabganj. The same day (22nd May) all the non-combatants betook themselves to the entrenchment. There was no lack of arms and ammunition, but there were only ten guns. On the 3rd June General Wheeler most unselfishly despatched 80 men of the 32nd under Capt. Lowe, to Lucknow, and 50 men of the 84th under Capt. O'Brien on the following day, although he was well aware that, in case of attack, his own position was not defensible.

On the night of the 4th of June the 2nd Cavalry rose and galloped off to Nawabganj, where the treasure was. The 1st Bengal Infantry followed them, and sacked the Treasury, threw open the Jail, burned the Public Offices and the Records, and captured the Magazine with all its ammunition and artillery, with which they prepared to march to Delhi. The 53rd and 56th eventually joined also, after being opened on by the guns in the entrenchment; but 80 men of the 53rd remained faithful to the end. The whole body of mutineers then started on the march to Delhi, but were persuaded by an emis-

sary of the Nana to return. On 6th June General Wheeler was warned by the Nana to expect an attack; and by noon the siege of Cawnpore had begun.

Never had a besieged garrison been called upon to do greater things than this little body of about 200 British soldiers and 30 officers, hampered by every disadvantage, and exposed to the

understood from the accompanying plan, adapted from Lieut. Mowbray Thomson's *Story of Cawnpore*. All round it were buildings and cover from which the enemy could maintain a murderous fire with practical impunity—a mess-house on the E., a Church and reading-room near the N.E. corner, a racquet-court and other buildings opposite



continuous fire of 3000 trained
foemen, well fed, lodged, and
armed. The total number in the
entrenchment is estimated at 900,
of whom more than half were
women and children. There were
many heroes in this little band of
whom any nation would be proud,
and to Captain Moore, of the 32nd,
has by common consent been
assigned the first place among them.

The position which the doomed garrison had to defend will be

the N.W. corner, a deep drain giving shelter to musketry men all along the W., and a row of incomplete barracks on the S., the nearest of which were only 250 yds. from the entrenchment. To prevent the enemy from absolutely enfilading our position it was necessary to occupy two of these, and Nos. 2 and 3 were accordingly held, the former at first by Lieut. Glanville, and then by Lieut. Mowbray Thomson, of

the 53rd, and the latter by Captain Jenkins of the 2nd L.C. By these barracks was a well which several as the general grave of all who were killed or died within the entrenchment. The lines of this were defended by the Redan under Major Vibart, of the 2nd L.C., on the N., by Ashe's Battery and by Eckford's on the E., by Totbury's Gun and Dempster's Battery in a projection on the W. side, and by brave hearts all round; but except for repelling assaults and keeping the enemy at a greater distance the guns were of but little avail. The two barracks, one of them with a thatched roof, were entirely unprotected, and the only well in the entrenchment, 60 ft. deep, was exposed to the full fire of the enemy.¹ And yet the dauntless British few held out for twenty days, and then only yielded because provisions were nearly exhausted. The proximity of the enemy's guns to the entrenchment would be incredible were it not that the distances were carefully recorded immediately after the recapture of the place in July. On the 9th June Sir Henry Lawrence at Lucknow received an urgent appeal for help from Wheeler; but it was impossible then to spare a man. By the 11th June the enemy had three mortars, two 24-pounders, three 18-pounders, one or two 12- and 9-pounders, and one 6-pounder playing on the entrenchment; and on the 12th June the thatched barrack was set on fire, and thereafter over 200 of those within the entrenchment lived day and night in the open in a temperature of 120 to 140 degrees of

heat. On the 15th June Captain Moore led a successful sally, which resulted in the spiking of five guns and the blowing up of a 24-pounder; but the supplies from the captured magazine were practically inexhaustible, and such bravery could produce no permanent results. No wonder that one-third of the numbers of the defenders were lost by the 21st June, that over 250 persons were buried in the outside well before the siege ended, that of fifty-nine artillery men only four survived at the end, and that when the British troops re-entered Cawnpore they found that there was not a single square yard in the buildings in the entrenchment that was free of the scars of shot. On the 16th June the enemy received reinforcements from Lucknow, and on the 23rd, the anniversary of Plassey, they attempted a home assault, which cost them over 200 of their numbers. On the 25th the Nana offered terms to the survivors, and these were accepted for the reason already given, though General Wheeler's voice was against surrender.

On the 26th there was an armistice, and it was arranged that the British should evacuate their fortified position, and, leaving their guns and treasure, should march out with their arms and 60 rounds of ammunition for each man, the Nana promising safe-conduct to the river-side and a supply of boats to take them down the Ganges. The next morning, 27th June, the survivors, about 450 in number, marched down to the Sati Chaura Ghat, and went on board the boats. It was 9 A.M. before they were all embarked, Major Vibart entering last of all. Then, on the order of Tantia Topi, a bugle sounded, the boatmen left the boats fixed in the mud, and a murderous fire of grape-shot and musketry opened on all sides. The thatch of the boats took fire, and while the sick

¹ John Mackillop, the joint magistrate, "jocosely said that he was no fighting man, but would make himself useful where he could," and undertook the work of drawing water from the well. In less than a week he was mortally wounded: his last words were an earnest entreaty that someone would go and draw water for a lady to whom he had promised it.

and wounded were suffocated in them, the sepoy jumped into the water and butchered others. Orders then came from the Nana to kill no more women, and about 125 women and children, wounded and half drowned, were carried back to Cawnpore.

One boat, which, as it happened, had been pushed off by the very bravest of the defenders, drifted down the river, and those on board propelled it as they could, with numbers rapidly diminished by the fire from the banks—Moore, Glanville, Ashe, and Fagan all being shot on it. For thirty-six hours it floated down stream, pursued and attacked by the enemy on all sides. On the second morning the occupants woke to find themselves in a side stream with sepoys on the banks ready to overwhelm them. Two officers, one sergeant, and eleven soldiers gallantly leapt ashore and dispersed the astounded crowd. But meanwhile the boat had drifted out of sight and was lost to them, and they were compelled to take refuge in a small temple, in which they were surrounded. Breaking out, and once more scattering the armed mob, they took to the river, and four of them—Lieuts. Mowbray Thomson and Delafosse, and Privates Murphy and Sullivan—being strong swimmers, reached the Oudh shore, and being succoured by the Talukdar of Murar Mau, lived to tell the story of Cawnpore.¹ The boat was subsequently overtaken by the enemy and brought back with its eighty survivors. The men were shot at once by order of the Nana, and the women and children sent to join the 125 who had been spared at the Massacre Ghat in the

Savada Kothi,¹ where the Nana lived during the siege. They were afterwards removed with a party of women and children from Fatehgarh to a small house called the Bibi-garh, near which the Nana was residing in a hotel. This house contained two rooms, 20 ft. by 10 ft., and a number of dark closets, and had a courtyard 15 yds. square in front of it; and in it between the 7th and 14th of July twenty-eight of the captives died.

But retribution was not far off. On the 7th of July General Havelock marched from Allahabad with 1400 British and 600 Sikhs. On the 12th of July, at 7 A.M., they halted at Balinda, 4 m. from Fatehpur. Here they were attacked by the Nana's army, and inflicted a crushing defeat on it. On the 15th of July Havelock again defeated the rebels at Aong, and drove them over the bridge across the Pandu Nadi, and the Nana, on learning that the British were advancing upon him, ordered the massacre of the captives in the Bibi-garh. The five men among them were brought out and killed in his presence. A party of sepoys were then ordered to shoot the women and children, but they intentionally fired at the ceiling of the rooms, though they belonged to the regiment (6th B.I.) which had murdered the seven Ensigns at Allahabad. Then a party of butchers were sent in to accomplish the foul deed, and all was quickly over. In the morning all the bodies were thrown into an adjoining well.

The Nana went out to oppose General Havelock with 5000 men and a formidable train of artillery, but the battle, fought 2 m. S. of the Cantonment on 16th of July, ended in the confused flight of the rebels to Bithur, after they had blown up the Magazine. On the 17th the British force marched on

¹ General Delafosse died in 1904, and General Mowbray Thomson, who received a K.C.I.E. through Lord Curzon, in 1917. Murphy died of cholera very shortly after his escape, but Sullivan survived for many years, and was placed in charge of the Memorial Garden.

¹ This lay to the W. of the row of incomplete barracks, and of the race-course W. of them, close to the Grand Trunk Road.

to occupy the Cantonments, but ere it reached them learned the mournful story of the massacres.

Four months later Cawnpore—which had been the base of operations for General Havelock's advance on Lucknow, several times begun and as often suspended—was the scene, once more, of bloody engagements. Sir Colin Campbell marched thence on the 9th of November 1857 to relieve Lucknow, leaving behind him for the protection of Cawnpore, his base of operations, 500 British and 500 Madras troops, commanded by Major-General Windham, of Redan celebrity. On the 27th of November, Sir Colin began his march back to Cawnpore, having with him 2000 women, children, sick, and wounded, and the treasure which had been rescued from Lucknow. On nearing the Bridge of Boats, on the 28th, he beheld a conflagration, which showed him that the enemy had taken the city to which he was returning.

Tantia Topi, a follower of the Nana, at the head of 15,000 of the Gwalior insurgents, had marched on Cawnpore, and by well-concerted movements, completed on the 19th of November, had cut off the place from all communication with the W. and N.W., from which its supplies had been obtained. On the 26th General Windham moved out from Cawnpore and attacked and repulsed Tantia's right wing; but on the two following days he was gradually driven back to his entrenchment on the river-side, leaving the bridge—the link with Lucknow—dangerously exposed. Sir Colin arrived just in time to save the bridge, but the clothing and stores prepared for the refugees from Lucknow fell into the hands of the rebels. Having despatched his convoy of ladies and wounded to Allahabad, Sir Colin, on 6th December, took the initiative. The arrangements made for driving

the enemy back from their line—which rested on the city and the brick kilns to the W. of it, and extended nearly as far as the Ganges Canal on that side—were completely successful; the Gwalior camp, with all its stores and magazines, was taken, and the enemy routed with great slaughter to beyond the canal. Owing to blundering the pursuit of their right and centre was not properly pressed at the time; but it was taken up next day by Brigadier-General Hope Grant, who finally scattered the enemy and captured fifteen guns.

There is one more sad memory connected with Cawnpore—the death on 27th April 1858, of Captain Sir Wm. Peel, the gallant leader of the Naval Brigade from the *Shannon*. He had been wounded at Lucknow on the 8th April at the taking of Martinière, and contracted small-pox from a dhooly in which he was taken to Cawnpore (having refused to occupy a stage-carriage, which his sailors had upholstered for him). He is buried in the old cemetery $\frac{1}{2}$ m. W. of the entrenchment. Among all the bravest of the brave who fought to put down the Mutiny was none braver than he.

On the way to the Memorial Church, which is about $1\frac{1}{2}$ m. distant from the railway station, is the site of General Wheeler's *Entrenchment*. The line of defences and the principal buildings inside them are indicated by pillars, those of the former being connected by a low hedge. To the S., across the road and adjoining the European barracks, is a small garden enclosure surrounding the well in which 250 of the garrison who were killed or died during the siege are buried. The inscription on the cross runs: *In a well under this Cross were laid, by the hands of their fellows in suffering, the bodies of men, women, and children, who died hard by during the heroic defence of Wheeler's*

ment when beleaguered by
Nana—June 6th to 27th,
MDCCCLVII.

The Memorial Church, built on the N.E. edge of the entrenchment, is in the Romanesque style ; it cost over £20,000, and was consecrated in 1875. On the walls are fourteen memorial tablets giving the names of those who died at Cawnpore in 1857. A fine view of Cawnpore is obtained from the belfry. Outside the church, on the S. side, is a railed memorial slab with an inscription commemorating "those who were the first to meet their death, June 1857," and a few yards farther E. are three graves in another enclosure with a cross and the record that—

"Here lie the remains of
MAJOR EDWARD VIRART,
2nd Regt. Light Cavalry,
And about 70 officers and soldiers,
Who, after escaping from the
Massacre at Cawnpore,
On the 27th of June 1857,
Were captured by the rebels at Shivrampur,
And murdered on the 1st of July."

The Sati Chaura Ghat is about ¼ m. N. by E. of the Church. A grassy road between banks 10 ft. or 20 ft. high, lined with trees, among which the murderers concealed themselves, leads down to the river. On the bank is a temple of Siva, of hexagonal shape, old and going to ruin. Narrow flights of steps lead from this temple to a broad enclosure flight, which in the cold season descend some way to the water. A brief inscription recalls the tragedy, but it is only too easy to imagine the terrible scene that took place here on 27th June 1857. From the head of the Sati Chaura Ghat ravine the road runs N. over the railway and the Ganges Canal to the Queen's Park. Here is a colossal statue in bronze (by a local sculptor) of the Queen-Empress Victoria ; a fine building has been erected as a memorial of King

Edward VII. and is used for public functions and entertainments. Adjoining the Park are the Memorial Gardens, situated at the E. corner of the city. These are beautifully laid out and well kept, and in the middle, upon a mound raised over the well in which the victims of the Bibi-garh massacre were buried, is the memorial, in the form of an octagonal Gothic screen designed by Sir Henry Yule, R.E. In the centre of the enclosure, on the actual well, is the figure of the *Angel of the Resurrection* in white marble, by Marochetti, with arms crossed on her breast, as if resigned to the Almighty Will, each hand holding a palm, the emblem of peace. This figure was the gift of Lord and Lady Canning. Over the arch is inscribed : "These are they which came out of great tribulation." Around the screen wall which marks the circle of the well is the legend : "*Sacred to the perpetual Memory of a great company of Christian people, chiefly Women and Children, who near this spot were cruelly murdered by the followers of the rebel Nana Dhundu Pant, of Bithur, and cast, the dying with the dead, into the well below, on the xvth day of July MDCCCLVII.*" Neither the screen nor the statue can be considered quite satisfactory. In front of the monument is a small enclosed cemetery. Two of the tombs in it are to the memory of the women and children of the 1st Company, 6th Battery, Bengal Artillery, and those of H.M.'s 32nd Regiment, who were slaughtered near this spot. Another records the murder on July 15, of R. B. Thornhill, Judge of Fatehgarh, his wife (a granddaughter of Mrs Siddons) and two of their children.

Close to the Memorial Gardens, 1 m. up the stream from Sati Chaura Ghat and beyond the fine bridge of the E. Indian Ry. is the site of the pontoon bridge, over which passed the convoy, 3 m.

long, of women and wounded, brought from Lucknow by Sir Colin Campbell; and here was Windham's small entrenched camp just by the Government Harness Factory.

Visitors who have their own motors should visit **Bithur**, 15 N. *viâ* Kalianpur. At Bithur is Brahmanvartha-Ghat, at which is shown the shoe of the horse which Brahma is said to have sacrificed after the creation of the world; also a temple built by the Mahrattas on a mound S. of the town, where Valmiki is said to have composed the original version in Sanskrit of the *Ramayana*. His house is also shown. In early Nov. is held a large festival, when 100,000 persons come to bathe in the Ganges. The Nana's palace was destroyed after the battle of Bithur on 16th August 1857. There are still many Mahratta Brahmans in the town.

317 m. **Fatehpur** (D.B. near ry. station and an Inspection Bungalow on the Grand Trunk Road); headquarters of the district of that name. Roads, to Cawnpore, 48 m.; to Allahabad, 71 m.; N.E. to Rae Bareli; S.W. to Banda. Motor-lorry service as far as Lalauli, on bank of Jumna R., on the road to Banda; also motor service (32 m.) to Kora (Jahanabad), an old town which in the days of Akbar and his successors formed part of the province of Allahabad. (See p. 446 under Kara.)

On the outbreak of the Mutiny here, on 9th June 1857, most of the Europeans at Fatehpur escaped to Banda; but the Judge, Mr R. T. Tucker, who refused to quit his post, was killed fighting valiantly to the last. He took up his position on the roof of the Court building and was only overcome when this was set on fire. The Commissioner of Allahabad wrote:—"It is impossible not to admire, how far it may be re-

gretted, the heroic devotion of the late Mr Tucker; nor is it much a matter of wonder that his conduct and his personal prowess actually succeeded in preserving for a few hours longer some show of order. Mr Tucker, by his earnest and open profession of religion, and by his unbounded personal liberality, had commanded the respect, if not the affection, of a large number of the inhabitants of the city, and, when the excited mob returned in triumph from his slaughter, two Hindus of the town stood out before them and reviled them as the murderers of a just and holy man: it is scarcely necessary to add that they immediately shared his fate." In the Fatehpur cemetery Mr Tucker's devotion to duty is commemorated on his grave. Evidence of his religious enthusiasm still survives in four huge masonry pillars erected by him on the Grand Trunk Road, to the W. of the town, close to the Inspection Bungalow. Two of these pillars bear inscriptions, in Urdu and Hindi, giving the substance of the Ten Commandments. Similar Urdu and Hindi inscriptions on the other two pillars are quotations from St John's Gospel. On 12th July 1857 General Havelock, after routing the rebel forces and capturing 12 guns, re-occupied the town. He was accompanied by Mr Sherer, who was appointed to the charge of Fatehpur and Cawnpore. On the 31st October 1857, the Naval Brigade, under Captain W. Peel, and a small force under Colonel T. S. Powell, of H.M. 53rd Regiment, reached Fatehpur. Mutineers, 2000 strong, were reported to be occupying a position at Khajuha, in the N.W. of the district. Powell at once sought out the enemy. When attacking on 1st November he was shot through the head, whereupon the command devolved on Peel, whose Brigade carried the enemy's position. The action is commemo-

vell's tomb outside the
unwarpur, 9 m. from
ad not 2 m. from the
ion of the E.I. Railway,
sight of the metalled
road running from Fatehpur
to **Bindki** (17 m., the most
important mart in the District) and
Khajuha (21 m., a decayed town of
some historical importance). It
was at **Khajuha** that the Emperor
Aurangzeb overthrew his brother
Shuja, capturing 114 guns, 115
elephants, and much treasure. In
honour of his victory he built a
large *sarai*, enclosing 10 acres, and
laid out the Badshahi Bagh, a
walled garden covering 18 acres.
One of the old garden pavilions, on
high ground, has been converted
into a good Inspection Bungalow,
which affords an excellent spot
for breaking a journey.

354 m. **Sirathu** (in the Allaha-
bad District), for **Kara**. This
place, which is on the river-bank,
was once of importance; the
provinces of Kora and Allahabad
which were taken from the Nawab
Wazir of Oudh by Clive in 1765
and given to the Emperor Shah
Alam, were often called "Corah
and Currah." Kora (Corah) is in
the Fatehpur district (see p. 445).
There are still some interesting
remains and ruins at Kara. It
was here that Ala-ud-din Khilji
basely murdered his uncle, the
Emperor Jalal-ud-din, in 1296. On
the opposite side of the Ganges is
Manikpur, now a village in the
Portabgarh district, where there
are extensive remains of mosques
and tombs dating from the reigns
of Akbar, Jahangir and Shah
Jahan.

389 m. **Allahabad junction**
(p. 48). The line passes the
Khusru Bagh and affords glimpses
of the mausolea in it.

From Allahabad the Delhi mail
proceeds to Mirzapur and thence
by way of Arrah and Patna to
Calcutta (Howrah) (Route 2).

Cawnpore to Lucknow.

Cawnpore is connected, (46 m.),
with Lucknow by two lines of
railway, which run parallel to each
other; the broad-gauge line of
the E.I.R. and the metre-gauge
line of the B. and N.W.R. As far
as Ajgain (22 m.) the railway
closely follows the road along
which Sir Henry Havelock and Sir
Colin Campbell advanced to the
relief of Lucknow. Beyond Unao
(12 m.) and near Ajgain is Basi-
ratganj, where the rebels were
thrice defeated by Havelock. From
Unao (D.B.) motor-buses run S.E.
to Maurawan (27 m.), and N.W. to
Bangarmau (31 m.). Some very
fair snipe and duck jhils in Unao
Dt.

The E.I.R. line passes N. of the
Alambagh to the junction station
at Lucknow, which is situated at
the Charbagh, on the S. side of
the old canal of Ghazi-ud-din-
Haidar (Route 22).

ROUTE 22.

LUCKNOW.

LUCKNOW,* is the ninth largest
city in the Indian Empire. It has
been the Capital of the Province
of Oudh since 1775 and still enjoys
that distinction. The Governor of
the United Provinces, of which
Oudh forms a part, resides here
during the great part of the cold
weather. Although Allahabad is
the official headquarters of the
Government, the Legislative Coun-
cil meets at Lucknow, and it has
its own Chief Court and gives its
name to the Anglican bishopric
of the United Provinces. Ad-
ministratively, Lucknow is the
residence of the Commissioner of
a Division. It is likewise an
important military centre. A

British cavalry regiment, two British infantry battalions and artillery, as well as two Indian infantry regiments, are quartered here; and it is the headquarters of the Lucknow military district and the 6th Infantry Brigade. The city, which is situated in lat. $26^{\circ} 51'$, long. $80^{\circ} 58'$, covers an area of 36 sq. m., and has a pop. according to the latest census (1921), of 240,566, including the Cantonments. It stands on a bend of the river Gumti, the Residency on the N. and the Martinière on the E., being equidistant ($2\frac{1}{2}$ m.) from the Junction Station.

Lucknow Junction station, at which visitors from all parts will alight, is at Charbagh, to the S. of the city. It has been completely remodelled, and the new station building, which is a little to the N. of the old one, was opened by the Governor of the United Provinces on the 19th December 1926. Four broad-gauge and two metre-gauge lines run through the station, which is the centre of the railway system serving the Province of Oudh. The former are: (1) the E.I. Ry. line, 45 m. from Cawnpore (Route 21), by which the G.I.P. Ry. mail from Bombay (885 m.) *viâ* Itarsi and Jhansi (Route 8) runs direct into Lucknow; (2) the Oudh and Rohilkhand section of the E.I. Ry. which runs S. to, 187 m., Benares Cantonment (Route 5) and joins the main line to Calcutta (616 m.) at Mughalsarai (Route 2); (3) the continuation of the same line, N.W. through Bareilly to, 102 m., Saharanpur (Route 20); and (4) the E.I. Ry. loop-line through Barabanki to Fyzabad (with a branch to Allahabad), Jaunpur, and Benares (Route 20). The metre-gauge lines are: (1) the main line of the Rohilkhand and Kumaon Ry. which, after traversing Lucknow, where there is a junction station at Aishbagh and another (Lucknow City) close to the Residency, runs in a

northerly direction to Sitapur, and Bareilly Junction, with branches from Bhojepura to Kathgodam, the terminal station for Naini Tal (Route 20, p. 426) and from Bareilly to Kasganj (p. 425); (2) the track, operated by the Bengal and North-Western Ry., from Cawnpore, which runs parallel with the broad-gauge line and passing through Lucknow connects at Aishbagh with the main line, *viâ* Barabanki, Gonda, and Gorakhpur, through Tirhut to Katihar Junction (Route 23). Lucknow is also an important road centre. By road the distance to Fyzabad is 79 m., to Sitapur 52 m., to Cawnpore 47 m., and to Rae Bareli 51 m.; to Hardoi (unmetalled) 67 m.

Topography.—To the left of the visitor, as he emerges from the Junction station, is La Touche Road, and to his right is Station Road; both of these lead into Abbott Road, in which is the Royal Hotel. Abbott Road proceeds E., near Government House, crossing Cantonment Road, Banks Road, and the end of Hazratganj, and then, turning slightly towards the N., continues under the name of Outram Road to the Sikandarbagh and across the river Gumti, when it joins the Fyzabad Road at right angles near the Badshahnagar Station on the B. and N.W. Ry. main line from Cawnpore to Katihar. Just by the Sikandarbagh Clyde Road (in which is the Carlton Hotel) runs W. past the Moti Mahal and the Shah Najaf into the Strand Road. La Touche Road, after its junction at right angles with Abbott Road, runs in a N.E. direction to the Kaisarbagh; almost parallel with it is the Cawnpore Road, which proceeds from the left of the Junction station and turning to the N.E., passes through Aminabad, the modern business quarter, then N. past the Kaisarbagh and the Chief Court building (Pain Bagh)

and skirts the E. side of the Residency, until it reaches the Strand Road. Canning Street runs from S. to N. from its junction with the Cawnpore Road near the station, and ends at the Shah Mina, close to the Medical College (which stands on the site of the old Machhi Bhawan Fort), the Great Imambara and the Rumi Darwaza. This is one of the military roads which were cut through the heart of the city after 1857. Another military road, Victoria Street, also starts from the Medical College (Machhi Bhawan) and proceeds for about 3 m. in a S.W. direction. Two W. to E. roads meet it on the way; firstly, Nadan Mahal Road, which becomes Ganga Pershad Road, and then Sri Ram Road after crossing Canning Street and at Aminabad Park turns S. for a short distance along the Cawnpore Road and continuing as Hewett Road crosses La Touche Road and connects with Abbott Road. A little further S. the Aishbagh Road takes off from Victoria St. and runs S.E. into Abbott Road. On reaching the line of the useless and disused canal of Ghazi-ud-din Haidar, Victoria Street swerves to the S., and joins the continuation of the Cawnpore Road at the Alam-bagh. Napier Street, the third military road, comes into the Medical College from the W. and passes to the N. of the Chauk; this is the road to Hardoi and Shah-jahanpur and the pilgrim route to Hardwar (Route 20, p. 420). The Strand Road runs along the river bank from the Iron Bridge, not far from the Medical College, past the Residency and the Chhattar Manzil until it joins Clyde Road, which then runs S. to Wingfield Park. From the Baillie Guard Gate of the Residency Neill Road proceeds past the Kaisarbagh into Hazratganj, where the principal buildings of the Civil Station are, and continues, as Park Road and Bandaria Bagh Road, into the

Cantonments and Dilkusha, leaving the Martinière and Major Hodson's tomb on the E. Lastly, Havelock Road runs E. along the line of the Canal, immediately to the N. of the Junction station, and making a half-circle to the N., crosses Cantonment Road (which comes down from the Kaisarbagh and joins Banks Road (which also comes S. from the Kaisarbagh) near Government House. Most of the places of interest which are usually visited, will be found on one or other of these roads. These cannot possibly be well seen in less than two and a half days.

Itinerary.—To those who are pressed for time, the following routes are suggested :

(1) Drive from the junction of Abbott Road and Hazratganj up the latter road, passing on the left the Post Office (Begam Kothi), Amjad Ali Shah's Tomb (the Chota Imambara), and Nur Bakhsh Kothi (the Deputy-Commissioner's house): visit the Kaisarbagh quadrangle and the Museum in the Lal Baradari; then proceed along Neill Road to the Residency, passing the Chief Court building (Pain Bagh) on the left, and on the right the Chhattar Manzil palaces, which can be visited after the Residency, when driving down the Clyde Road towards the Moti Mahal and Shah Najaf (left) and the Khurshid Manzil (right) to the Sikandarbagh. From here the starting-point can be reached down Outram Road past the King's Stables (Lawrence Terrace).

(2) Drive straight to the Residency and continue by the Strand Road to the Medical College (on the site of the Machhi Bhawan); visit the Great Imambara, and drive through the Rumi Darwaza and Victoria Park to Husainabad and the Clock Tower; visit the Husainabad Imambara and proceeding through the gateway, turn to the left and visit the Jami



History.

The original centre of the city is believed to be the high ground crowned by the Mosque of Aurang-



W. S. GILMAN TO FORMER PRES. OF
rule meant—a rule continuing
unchanged, in spite of threats and
warnings, for a period of thirty
years. As for the buildings which

and
Iravaza

ds past the Kaisarbagh into
utganj, where the principal
ings of the Civil Station are,
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ndaria Bagh Road, into the

and Victoria Park to Husainabad
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Masjid. By crossing the Hardinge Bridge and proceeding about $\frac{3}{4}$ of a m. beyond, Mohsin-ud-daula's *Karbala* can be reached; it is 100 yds. from the high road. It is worth while, if there is time, to prolong the drive to the Musa Bagh, rather more than $2\frac{1}{2}$ m. N.W. of Husainabad.

(3) Drive from the Junction Ry. station, down the Cawnpore Road S. to the Alambagh, and then proceed N.W. up Victoria Street until the Nadan Mahal Road is reached. Turn E. down this road and visit the Nadan Mahal and the tomb of Ibrahim Chishti. Then drive S.E. down Sri Ram Road, passing Aminabad Park, and crossing the Cawnpore Road and La Touche Road, proceed down Hewett Road until it joins Abbott Road. Drive E. along Abbott Road until the junction with Hazratganj; then drive S. down Park Road past the Wingfield Park to the Martinière and then to the Dilkusha.

Manufactures. — Lucknow has never been an industrial centre. The chief art products of the city are silverwork and the clay models which have largely taken the place of the terra-cotta figures for which Lucknow was famous a few years ago. An extensive trade is also carried on in copper and brass vessels and also in cotton fabrics. Shawl-weaving, introduced from Kashmir in the time of Asaf-ud-daula, has long been extinct. "Bidri" (silver damascening on gun-metal) work will likewise soon be a lost art. The **School of Arts and Crafts**, which is located in buildings on the river Gumti, opposite the Chhattar Manzil, is doing excellent work in reviving and developing art industries.

History.

The original centre of the city is believed to be the high ground crowned by the Mosque of Aurang-

zeb (p. 468) on the right bank of the river Gumti which overhangs the Hardinge Bridge. It was here on the spot known as Lakshman Tila, that a family of Sheikhs from Bijnor built a fort towards the end of the 13th century. Lucknow was then included in the dominions of the Sharki Kings of Jaunpur (1354-1476) and acquired its present name. Its importance dates from the reign of Sher Shah (1540-45). The traveller, De Laët, called it a *magnum emporium* in the days of Jahangir, but the modern Lucknow is principally the creation of the Nawabs of Oudh, generally known as the Kings of Oudh, a title accorded by the British in 1819. The first Nawab, Sa'adat Khan Burhan-ul-mulk (1732-39), who was originally a Persian merchant, was made Governor of Oudh in 1732 and Wazir (minister) of the Empire in 1739. His successor Safdar Jang (1739-53) lived principally at Delhi and is buried there (p. 313). The third Nawab Wazir, his son Shuja-ud-daula (1753-75), who joined issue with the British at the battle of Buxar (1764), resided at Fyzabad, and is buried there. His son, Asaf-ud-daula, removed the capital to Lucknow, which under him grew into a great city; the badge of the fish which appears on so many of the royal buildings is the mark of rank granted by the Emperor of Delhi to the Oudh Nawabs. Of those who followed, it must suffice to say that, with the exception of Sa'adat Ali Khan, no reigning dynasty of India ever showed such a series of vicious and incompetent princes. Any one who may have any doubts as to the condition of the Province of Oudh under them has only to read the journals of Sir W. Sleeman to realise what their rule meant—a rule continued unchanged, in spite of threats and warnings, for a period of thirty years. As for the buildings with

which they adorned the capital, nearly all are of a degraded and barbarous type of architecture, and apart from the two tombs in the Kaisarbagh and the Jami Masjid, not one of them possesses any real architectural merits, though the large hall of the great Imambara is a very grand room.

Asaf-ud-daula (1775-97). Built the Daulat Khana (on the banks of the river, of which only the Asafi Kothi remains), the great Imambara and its mosque, the Rumi Darwaza, Khurshid Manzil, the Banqueting Hall, which was the original Residency, and the garden pavilions at the Charbagh and Aishbagh. His reign may be regarded as the golden age of Lucknow. The Court was visited by such painters of European reputation as Zoffany, Ozias Humphry, and Thomas and William Daniell.

Saadat Ali Khan (1798-1814), the best of his line, was placed on the throne by Sir John Shore after the deposition of Wazir Ali (p. 90). Built the Moti Mahal and Dilkusha, the Throne Room (Lal Baradari), and the King's Stables; also the Terhi Kothi and the Baillie Guard, as a guard-room for the Resident, Col. John Baillie. He bought the Farhat Bakhsh Palace from General Martin and lived in it.

Ghazi-ud-din Haider, first king of Oudh (1814-27). Built the Residency proper, the Kaisarbagh tombs, the Tomb at Shah Najaf, the Kadam Rasul and the Wilaiyati Bagh, and constructed the canal on the S. side of the city.

Nasir-ud-din Haider (1827-37). Built the Chhattar Manzils and the Tarawali Kothi.

Muhammad Ali Shah (1837-1842). Built the Husainabad Imambara and Tank, the Sat Khanda, the Jami Masjid, and the Badshahbagh.

Amjad Ali Shah (1842-47). Built the Hazratganj Imambara, in which he is buried.

Wajid Ali Shah (1847-56). Built the Kaisarbagh Palaces and Sikandarbagh. In February 1856 Wajid Ali Shah was deposed, and on 13th March removed to Calcutta. General Outram, who was Resident at the time, became First Chief Commissioner of Oudh. The ex-King lived thirty years in Calcutta, and there he died in 1887, aged sixty-eight. Portraits of most of the Kings of Oudh will be found in the Baradari in the Clock Tower gardens fronting the Husainabad Tank (p. 469).

The best books upon the siege of the Lucknow Residency are perhaps Martin Gubbins' *Mutinies in Oudh* (1858), Lady Inglis' *Siege of Lucknow* (Osgood, 1893), Lieutenant-General M'Leod Innes' *Lucknow and Oudh in the Mutiny* (Innes, 1895), L. E. R. Rees' *Personal Narrative of the Siege* (1858), and Sergeant Forbes Mitchell's *Reminiscences of the Great Mutiny* (Macmillan, 1904). Innes' book contains valuable views of the different posts in the Residency; and a number of photographs of the date of 1857-8 will be found in the first volume of Sir George Forrest's *History of the Indian Mutiny* (Blackwood, 1904).

An unusually good local guide is the one written by the late Mr E. H. Hilton, who, as a Martinière boy, shared in the defence of the Residency.¹

The Mutiny of 1857.

However justifiable and necessary may have been the annexation of Oudh—from which the great mass of the high-caste² soldiers of

¹ See also *Three Days at Lucknow*, by Col. Newell, and *Lucknow, the Garden of India*, published by Messrs G. W. Lawrie & Co. (Rs. 2.)

² About 40,000 men. Nearly double this number had been discharged from the Oudh army.

the Bengal army then came—it is beyond doubt that it became one of the principal causes of the sepoy mutiny of 1857. As it happened, General Outram had been compelled to take leave in May 1856. Mr C. C. Jackson acted for him until March 1857, when he was succeeded by Sir Henry Lawrence, a bare seven weeks before the outbreak of the Mutiny at Meerut and Delhi.

At that time the garrison of Lucknow consisted of three Bengal Infantry regiments (13th, 48th and 71st), the 7th regiment of Light Cavalry, two regiments of Oudh Infantry, a regiment of Military Police, and three Indian batteries of Artillery, in all about 7000 men; the European force consisted of H.M. 32nd Regiment under Lieutenant-Colonel Inglis and one battery of Horse Artillery, less than 1000 strong.

Already there had been a mutiny at Lucknow of the 7th Oudh Irregular Infantry at the Musabagh on 3rd May. Major Gall, commanding the 4th Irregular Cavalry, on being informed of the imminent danger of the European officers, galloped up to the vicinity with his troopers, and soon after Sir H. Lawrence arrived with a mixed force of Europeans and Indians. The mutineers then broke and fled; some were made prisoners, and others gave up their arms. On 12th May, before the news of Meerut and Delhi had reached Lucknow, Sir H. Lawrence held a *darbar* in the Cantonment Residency, when he harangued the troops and promoted two Indian officers who had given information of the intended outbreak. This gave confidence for a short time until the malcontents perceived that the Government was unable to take immediate steps to recover Delhi. It then soon became apparent that nothing could prevent further serious trouble. Sir H. Lawrence quietly set about collecting supplies in the Residency

and the Machhi Bhawan to provide against all possible contingencies, and two Companies of H.M.'s 32nd Regiment were placed in the former. On the 23rd May two detachments of cavalry sent to Cawnpore to clear the road between it and Agra mutinied near Mainpuri, and killed one of their officers, the rest escaping by flight.

On the 30th May mutiny broke out in the Mariāon Cantonment, 3 m. N.E. of Lucknow across the Gumti, and quickly became general. Brigadier Handscombe was shot dead, and the mutineers attacked Sir Henry and his staff at the artillery ground, but were driven off with some rounds of grape, which killed many of them. On the 31st of May a Mr Mendes was murdered in his own house in the city, and martial law was proclaimed; it was now decided that the supplies should be mainly placed in the Residency. The authorities maintained a bold front; but the news of mutiny came in from every side—Bareilly on 31st May, Sitapur on the 3rd of June, Cawnpore on the 4th, and Fyzabad on the 6th—and on the 11th of June the cavalry of the police mutinied, and the infantry followed their example. Large bodies of mutineers now began to gather round Lucknow. These finally concentrated at Chinhat, a village lying 7 m. from Lucknow, on the Sitapur road, across the Kokrail nulla, and were attacked at Ismailganj, 1½ m. W. of this, by Sir Henry Lawrence on the 30th June with a small force of ten guns, 100 cavalry, and 550 infantry, of whom only 300 were British. Unfortunately the troops started later than had been intended, and, by some sad blundering, without having received any food. The overpowering heat prevented them from making a determined attack on the rebels, who were strongly posted and fought with great confidence; and finally the little

force had to retreat with a loss of over 100 British soldiers, including Lt.-Col. Case of the 32nd. The enemy at once followed up their success, and the siege of the Lucknow Residency began on the next day, 1st July. On that night the Machhi Bhawan garrison fell back to the Residency, blowing up the magazine and destroying the guns there as far as was possible. On 2nd July Sir H. Lawrence was mortally wounded by a shell fired from the howitzer captured at Chinhath, and died two days afterwards. Major Banks succeeded him in chief civil authority, and Colonel Inglis in command of the troops. The garrison was partially relieved by General Havelock on 25th September, and was finally relieved by Sir Colin Campbell on 17th November.

The Siege of the Residency and the Reliefs.

The Residency entrenchments were in shape approximately a square with sides about a quarter of a mile long and enclosing an area of some 32 to 36 acres. Its longer diagonal was about 700 yards and the shorter 450 yards. At the N.W. corner, connecting the N. and W. fronts, was Innes' Post, on a spur which projected from the W. front. At the N.E. corner was the Baillie Guard post; and along the E. face were a number of posts on the high ground—Fayrer's, the Post Office, and Germon's, with Saunders' and Sago's in front of them. The road to Cawnpore skirted the walls of the advanced posts. The S. face had at its two ends Anderson's post and Gubbins' post; the whole of this front was thrown well forward and contained in a straight curtain the Cawnpore Battery, Deprat's, the Martinière post, the Brigade Mess and the Sikh square. On this front the enemy's position was not more than 30 or 40 ft. distant along its entire length;

one of their most important posts was Johannes' house. Fortunately the ground was so covered with ruins that although there was shelter, there were no facilities for movement. The W. face lay between Gubbins' and Innes' posts, and consisted of three ranges of Residency outhouses, and then the church and cemetery. Evans' Battery on the high level flanked the S. side of Innes' post, and Innes' post flanked the whole of this W. front which, except at that post, was never seriously attacked.

On the 2nd of July, the day on which Sir H. Lawrence was wounded, the rebels attacked the Baillie Guard Gate. At first the deaths averaged from fifteen to twenty daily, many being killed by an African, who fired from Johannes' house without ever missing. On the 8th Captain Mansfield and three other officers and Maycock, a civilian, sallied out, spiked a gun, and killed about forty of the rebels without losing a man, though three were wounded. On the 9th another sortie was made, when O'Keene, a private of the 32nd, spiked a gun. On the 10th, the ammunition of the rebels' cannon falling short, they began to fire pieces of wood, copper coin, iron, and even bullocks' horns. Fortunately the old State guns had been collected by the care of Sir Henry Lawrence on the low ground under the Redan, and happily for the besieged, there was no arsenal in Lucknow from which the mutineers could obtain unlimited quantities of gun ammunition. On the 14th the enemy made a general attack. On the 16th they made a night attack on Gubbins' Battery, but were beaten back. On the 20th of July they exploded a mine near the Redan, attempted to storm the Baillie Guard, and made their first general assault at every point, pouring in volleys of musketry, and sending shell after shell into the entrenchments. The mine did no harm to the Redan

Battery, but the enemy, supposing a breach to have been made, rushed up the glacis at the double with fixed bayonets. Hundreds were shot down; but their leader, waving his sword, on which he placed his cap, shouted to them to come on. Again they advanced, but the grape made huge gaps in their ranks, a musket ball killed their leader, and they then retreated, leaving heaps of slain and wounded. At the same time a furious attack was made on Innes' outpost, where Lieutenant Loughnan, of the 13th Bengal Infantry, with 24 English soldiers, 12 civilians, and 25 sepoys, beat back the whole host of rebels, who at last slowly retreated, carrying off 100 of their wounded comrades. At Saunders' and Sago's Posts a column of rebels with a green standard was, after some hours' hard fighting, beaten off, with the loss of all their commanders and about 60 men. The fight ended at 4 P.M.

Though repulsed at all points, on the 20th the enemy maintained a furious cannonade, and planted new batteries. On 21st July Major Banks was shot, and owing to their fire the windows of the houses within the Residency had to be barricaded, and even then inmates were shot inside them. One great torment was the flies, which swarmed in incredible numbers, the ground being black with them. On the 25th July a letter was received from the Quarter-master-General of General Havelock's force bidding the besieged to be of good cheer, as a large relieving force was coming. But days passed and the rebels were busy with their mines, and but for the countermining by Captain Fulton, of the Engineers, the place must have fallen.

On the 10th of August there was a second general attack, but the enemy showed little courage, and they were easily beaten off. On the same day a mine was exploded at Sago's Garrison, which de-

stroyed some outhouses, and blew up two English soldiers into the air, who, however, were not killed. Another mine between the Brigade Mess and the Cawnpore Battery demolished a stockade, and the enemy attempted to enter, but were repulsed. The 8-in. howitzer which the rebels took at Chinhat played on Innes' Post with great effect, bringing down beam after beam, and making many breaches. On the 11th of August Major Anderson, the Chief Engineer, died. On the 14th Captain Fulton exploded a mine under a house near Sago's Garrison, killing 50 to 60 of the enemy. On the 18th the second Sikh Square, garrisoned by 15 Christian drummers and musicians and 15 Sikhs, was blown up by the rebels, and 7 Christians and 2 Sikhs were buried under its ruins. A large breach was made, and the enemy delivered their third home assault, which was the nearest of all to being successful, but their leader was killed, and they retired. Captain Fulton, with a number of volunteers, then sallied out, destroyed a number of houses, and blew up the shaft of another mine begun by the rebels.

On the 20th August the house called Johannes' was blown up by Captain Fulton, and 60 to 80 of the rebels were killed. Captain Fulton then headed a sally, and after driving out the insurgents from several buildings, blew them up. Captain M'Cabe, of the 32nd, headed another party, and spiked two guns. Previous to this M'Cabe had attacked Johannes' house and bayoneted a number of the enemy, who were found asleep, and amongst them the African who had picked off so many of the English during the first days of the siege, and had been christened by the soldiers "Bob the Nailer." On the 29th of August, Angad¹

¹ He was still living in 1876, and was presented to King Edward VII., then Prince of Wales.

the spy brought a letter from Cawnpore saying that the relief would take place in three weeks. On the 5th of September the rebels made their fourth and final attack, having previously exploded three mines. They advanced boldly to the Brigade Mess, but were driven back with the loss of 100 men. They then attacked the Baillie Guard and several other places, but were similarly repulsed. On the 14th Captain Fulton was killed at Gubbins' Battery by a 9-pound shot, which took his head completely off.¹ On the 23rd of September a furious cannonade was heard outside the city, and confirmed the news received the day before of the approach of Generals Outram and Havelock. On the 25th smoke and the crack of musketry showed that street fighting was going on. The fire advanced steadily towards the entrenchments, and the relievers finally entered them in the evening.

General Havelock, who had reached Cawnpore on the 17th July, and whose troops had destroyed the palace at Bithur on the 19th, crossed the Ganges, and advanced towards Lucknow on the 25th, with only 1200 men, and fought two actions with the enemy at Unao and Basiratganj on the 29th. In these actions he lost one-sixth of his force, and was compelled to fall back on Mangalwar. Advancing once more from there, he defeated the enemy again severely at Basiratganj on 4th August, but thereafter had no option but to retreat to Cawnpore; before doing so he beat the enemy a third time at Basiratganj. Three days after his return there he drove a new force of rebels out of Bithur on

16th August; but it was not till the 18th September that sufficient reinforcements arrived to enable him and General Outram (who had joined the force meanwhile, but chivalrously waived his command in favour of General Havelock) to cross the Ganges again with 3000 men. On the 21st he defeated the enemy again at Mangalwar, and on the 23rd at Alambagh, where the news of the capture of Delhi reached him. As the flooded state of the country across the Gumti made it impossible to move guns and so effect the relief of the Residency from the left bank, the forces moved forward for their final effort on 25th September by way of the Charbagh (where the Junction railway station now is) in front of which sharp fighting took place at the Yellow House.¹ Crossing the canal and leaving the 78th as a rear-guard on the bridge, the troops followed the line of the canal to the old barracks of the 32nd (now Lawrence Terrace), just to the N. of the E. end of Hazratganj, and from there passed on to the Sikandarbagh, and then followed the road past the Shah Najaf to the Moti Mahal, having encountered but little opposition. At the Moti Mahal they came under heavy fire from the Khurshid Manzil and from a battery at the corner of the Kaisarbagh, and were checked for the moment. But the 78th Highlanders who had been left at the Charbagh as rear-guard and had gone up Hazratganj, to the left of the main column, now took the battery in the rear; and the united column pushed on to the Chhattar Manzil Palace still under heavy fire. At the corner of

¹ He was "The Defender of Lucknow, and was the heart and soul of the contest so long and energetically waged against such fearful odds." — Sir Joseph Fayrer's *Narrative*.

¹ It was here that Captain William Olpherts, R.A., greatly distinguished himself and won the Victoria Cross. When a man of the dauntless courage of Sir James Outram records of the deed by which the reward for exceptional valour was won, "Bravery is a poor and insignificant epithet to apply to a valour such as yours," his name ought not to be forgotten by Englishmen.

this palace was a square enclosure, afterwards known as the Dhooly Square, in which a short pause took place, while it was debated whether the troops should push on or not, and during this Brigadier-General Neill was shot through the head while seated on his charger in a gateway (the Sher Darwaza). The decision having been for an advance, the troops issued from the square and turned to their right towards the Residency. The Highlanders and Sikhs, who took the farther road to the Khas Bazar, suffered considerably; the rest of the force took the nearer road into the Painbagh (where the Chief Court building now is), and, passing E. of the old Jail (where the District Judge's Court stands), took a battery of the enemy in the rear with but little loss. Both columns, uniting once more by the Clock Tower, entered the Residency Gate and relieved the beleaguered garrison, though not without an unfortunate incident, which cost the lives of several brave Sikhs. The heavy guns and the wounded remained for the night at the Moti Mahal. When the latter were being brought in next day the dhooly-bearers were by a terrible mistake led into the square above mentioned instead of directly into the Chhattar Manzil, and were brought under a deadly fire of the enemy. Deserted by the bearers, the wounded were heroically defended by Surgeon Anthony Dickson Home and a few privates, who held one position after another with desperate resolution, and were finally rescued from the Residency after all hope of escape was lost: for this deed of valour the surgeon and three privates received the Victoria Cross.

This relief was not, however, effected without most serious loss; 2000 soldiers had reinforced the garrison, but 550 officers and men were killed and wounded. The posts in the Residency were

riddled with cannon-shot, and the Cawnpore Battery was a mass of ruins; the outpost at Innes' House was roofless, and out of the Brigade Mess alone 435 cannon-balls were taken. The relieving generals at once took possession of the Terhi Kothi and the Farhat Bakhsh Palace, as also the Chhattar Manzil Palace, from which and from the Clock Tower the enemy's fire had been most fatal. But though the garrison had extended their positions, the enemy were far from abandoning the city, and Generals Outram and Havelock, with their troops, were themselves blockaded. On the 26th of September a sortie was made; two mortars were spiked and a powder magazine blown up. Captain Lowe brought in as trophies an 18-pounder, a 9-pounder and five smaller guns. After this the garrison frequently took the offensive, and captured several positions. Attempts were then made to open communications with the Alambagh, where the relieving force had left their baggage and ammunition, with 4 guns and 300 men. The attempt failed, for an intervening mosque, filled with riflemen, was too strongly fortified to be taken without very great loss. The besieged now repaired their defences, and extended them near Innes' Post by taking and fortifying a mound, which became one of their strongest positions. Desultory fighting went on incessantly, and the palaces which had been taken by our troops continued to be the object of severe attacks. Provisions, also, again became scarce.

On the 10th of November Sir Colin Campbell¹ reached the Alam-

¹ Sir Colin Campbell, then in his sixty-fifth year, left England on 11th July, and reached Calcutta on 13th August. There he was detained forwarding troops and making arrangements till 27th October. On 1st November he reached Allahabad, and on 3rd November arrived at Cawnpore, and on 9th November left that place to join the force already well on the road to Lucknow.

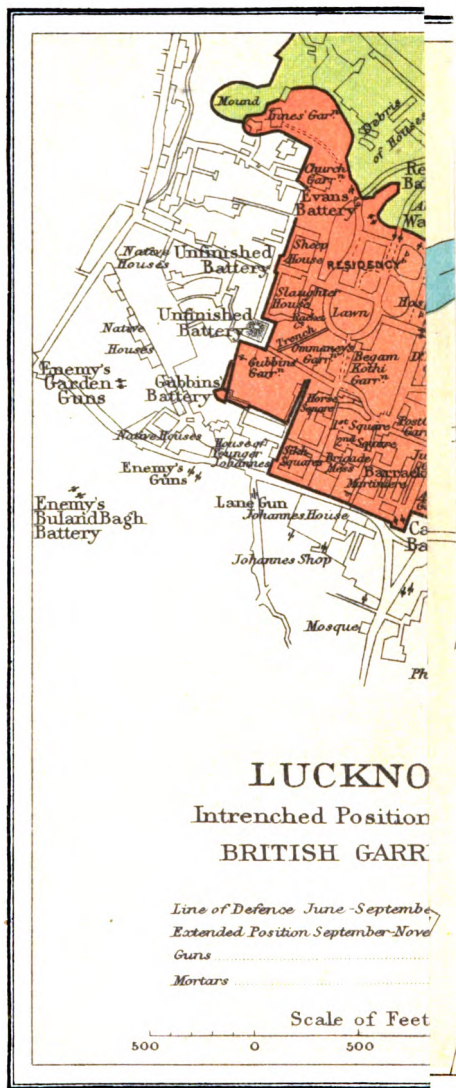
bagh, and relieved the garrison besieged there. His force consisted of 4500 men, with which he had to meet 30,000 to 40,000 trained rebels, and as many more irregular volunteers. It was at this time that Thomas Henry Kavanagh, an uncovenanted officer who had distinguished himself in several sorties, offered to carry despatches from Sir James Outram at Lucknow to Sir Colin Campbell at the Alambagh, and owing to his courage and address succeeded in conveying them through the lines of the enemy, a feat for which he received the Victoria Cross. After a reconnaissance towards the Charbagh to deceive the enemy, Sir Colin left his baggage in the Alambagh and proceeded to the Dilkusha, in which movement his advanced guard encountered a heavy fire, and drove the rebels past the Martinière College. On the 12th an attack of the rebels was repulsed; on the 14th the rear-guard joined; and on the 16th the whole force, except the 8th Regiment, left to guard the Dilkusha, advanced against the Sikandarbagh. After a fierce conflict the 4th Punjab Rifles, the 93rd Highlanders, and the 52nd, broke into the enclosure, and next day 2000 dead bodies of the rebels told the result. While this fight was raging the English suffered much from a murderous fire directed upon them from the Shah Najaf Tomb. This place was next attacked by Peel's Naval Brigade and the 93rd, and finally was fortunately taken, the enemy abandoning it at the last moment. The troops then rested for the night, throughout which they were fired on continually from the adjacent buildings. On the 17th the Khurshid Manzil — which had been used by Her Majesty's 32nd as a mess-house — a large, two-storeyed, flat-roofed house, flanked by two square turrets, was stormed. In the afternoon Generals Outram and Havelock,

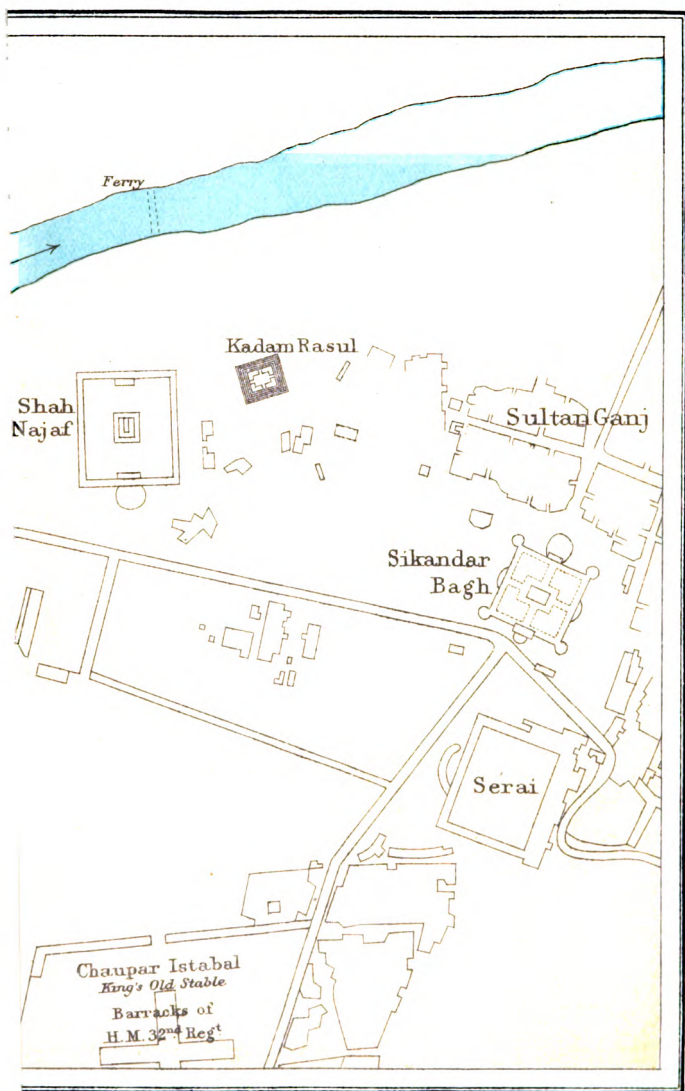
who had occupied the Hiran Khana outside the Chhattar Manzil, crossed by the Moti Mahal to the mess-house, and met Sir Colin Campbell there, and the relief of Lucknow was finally effected.

The British loss was 540 killed and wounded, of whom 10 officers were killed and 35 wounded. That evening Sir Colin decided that the garrison, as well as the sick and wounded, women and children, should be withdrawn from the Residency to the Dilkusha, the enemy being deluded, meanwhile, by the capture of Banks' House (now Government House) and a heavy bombardment of the Kaisarbagh. This was carried out on the 22nd, the enemy continuing to fire into the old positions long after they had been abandoned. On the 24th of November General Havelock died at the Dilkusha, and was buried next day in the Alambagh, to which the whole force fell back. On the 27th the convoy of the sick and women and children started for Cawnpore. General Outram was left at the Alambagh with a force finally made up to 3500 men and 25 guns.

The Recapture of Lucknow.

Sir Colin returned in March 1858, before which time six attacks had been made on the British position (which lay across the Cawnpore Road slightly in the rear of the Alambagh), and beaten off. The forces which Sir Colin Campbell brought with him for the recapture of Lucknow consisted of 17 regiments of infantry, 28 squadrons of cavalry, and 134 guns—in all 20,000 men—and the supporting Nepal army, under Sir Jang Bahadur and General Franks, of 6000 men, while the numbers of the enemy were 100,000, and the guns planted on their triple line of defence 100. On the 2nd of March the army moved from the Alambagh to the Dilkusha, and





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on the 6th a force under General Outram crossed the Gumti to operate against the enemy from the left bank. This completely turned the first line of defence along the canal, and it was abandoned by the mutineers without a struggle on the 10th. Captain Butler, who swam across the Gumti to inform the force on the right bank of its abandonment, received the Victoria Cross for this feat of daring. No opposition was offered either at the Sikandarbagh or Shah Najaf, which were occupied next day. On the 11th the advance on the enemy's right was also commenced by the seizure of Banks' House, which was followed up on the 11th by the capture of the Begam Kothi, by the 93rd and 4th Punjab Rifles, where 800 of the enemy were killed, and where Major Hodson was shot. On the 14th the Hazratganj Imambara, up to which a way had been sapped through the houses, was seized, and the right of the enemy's second line of defence, which ran from here past the Tarawali Kothi and Khurshid Manzil to the river E. of the Moti Mahal, was thus turned. Nor was this all, for a party of the Highlanders and the 10th Regiment, boldly pushing on, established itself in a palace commanding the Kaisarbagh enclosure, round which the last line of defence had been drawn, and was at once supported by Generals Franks and Napier. After desperate fighting inside and outside, the enemy abandoned their position, and fell back into the city. On the 16th General Outram, who had been kept back by the Commander-in-Chief, crossed the Gumti and occupied the Residency and the Machhi Bhawan, and on the next day the Husainabad Imambara. Arrangements were then made to drive out and corner the enemy completely, the intention being to intercept the rebels at the Musabagh. This failed of

execution through the immobility of Col. Campbell, who was in command of a force of British cavalry; and the rebels streamed away to maintain the struggle in Oudh and Rohilkhand for another year.

The Residency.

The Residency is the spot which all Englishmen will wish to visit first in Lucknow. It is entered on the E. side by Neill Road at the famous Baillie Guard Gate; and the path then leads directly to the Residency between the Banqueting Hall on the right and Dr Fayrer's house on the left. The gate was banked up with earth inside during the siege, and Generals Havelock and Outram entered through the embrasure of Aitken's Battery to the right. When the evacuation of the Residency on 22nd November 1857 was carried out, the doors of the gate were closed by Colonel Inglis as soon as Sir James Outram had passed through them. The gardens are beautifully arranged and perfectly kept, and the place now reflects that peacefulness which properly belongs to sad scenes long since enacted, in the midst of which one can think, thankfully and proudly, of the events and deeds of that summer of 1857.

The Baillie Guard was partly used as a store-room, and partly as barracks for the garrison. In the Southern angle of the guard was a concave-shaped guard-house, removed after 1857. Inside the Baillie Guard is a tablet in memory of the Indian officers and men of the 13th B.I., who held the post, and whose commander, Lieut. Aitken, received the V.C. In front is a memorial erected by Lord Northbrook to the faithful Indian soldiers, numbering 700 out of a total combatant force of 1480, who shared the defence with the British. The foundation-stone of

it was laid by King Edward VII., then Prince of Wales, on 7th January 1876.

Immediately inside the Gate, to the right, is the **Treasury**, which was used for the manufacture of Enfield cartridges. Next to this is the **Banqueting Hall**, now roofless and ivy-grown, which was turned into a hospital. On the left of the Baillie Guard Gate are the ruins of **Dr Fayrer's House**.¹ A tablet on the wall of an inner room, visible from the pathway, commemorates the spot where Sir H. Lawrence died on the 4th July.

The house was occupied on the first relief by Sir James Outram and his staff. The subterranean rooms, or "taikhanas," here and at the Residency and the Begam Kothi, in which most of the women and children were protected, will be found specially interesting.

On the lawn in front of the Residency is a fine marble runic cross inscribed :—

In memory of
MAJOR-GEN. SIR HENRY LAWRENCE,
K.C.B.,
And the brave men who fell
In defence of the Residency,
1857.

To the W. is an obelisk of Cornish granite erected in 1899 in memory of the officers and men of H.M. 32nd Regiment by the 1st Battalion of the Duke of Cornwall's Light Infantry, their successors, who were then quartered in Lucknow after an absence of forty years. It was unveiled by Lady Inglis, the widow of Sir John Inglis, who was with her husband during the siege. Some of the officers and men perished at Cawnpore (p. 439) with the women and children of the regiment. The names of Case, Moore, M'Cabe and Webb, which are inscribed on the

¹ Dr (afterwards Sir Joseph) Fayrer was the Residency surgeon. He revisited Lucknow in 1876 as a member of the staff of the Prince of Wales (King Edward).

obelisk, are eloquent of the deeds and the devotion to duty of themselves and their comrades.

To the S.E. of the Residency building is a memorial erected in honour of Major-General Sir John Inglis, K.C.B. (died 1862) by his surviving comrades and friends in 1894. On the other side of the Residency, and S. of the cemetery, is a monument erected in 1883 by the 2nd Battalion of the Seaforth Highlanders, in memory of the officers and men of the 78th Highland Regiment, who fell in the years 1857 and 1858. The regiment were with Havelock in his advance and relief and fought subsequently in all the Lucknow operations up to the recapture by Sir Colin Campbell. To the N. and S. of this monument are 68-pounder guns bearing the word "Shannon." These belonged to Sir William Peel's Naval Brigade, which broke down the defences of the Shah Najaf and the Martinière during Sir Colin Campbell's final operations in 1858.

The **Residency Building** is almost a complete ruin, though a very beautiful one; but it is still possible to ascend the staircase of one of the towers. Upon the other throughout the siege the Banner of England floated, and still flies in tribute to the dead.

The entrance to the Residency is on the W. by a modern portico. In a room on the ground floor, which has been fitted up as a **Museum** and in which a number of engravings and relics of the utmost interest have been placed, the visitor will find a model of the entrenched position as it was in July 1857, at the commencement of the siege. It was constructed by the Rev. T. Moore, who was chaplain at Lucknow from 1871 to 1874, and should be studied with care, for it exhibits a wholly different scene from the one which now meets the eye. (See also plan

opposite p. 457.) As it appears at present, the position seems to be a strong one; but in 1857 it was commanded by neighbouring houses (now completely swept away), which were in the possession of the rebels and were so close that they were separated from the buildings within the enclosure by narrow lanes and hastily improvised trenches and barricades. As soon as the siege began, these houses were filled with sharpshooters who kept up a perpetual fire and caused many casualties. So weak were the defences and so untenable was the position, from a military point of view, that Sir Henry Lawrence hardly expected to hold out without relief for more than fifteen days. Such was the desperate courage which animated the garrison that, in spite of constant assaults, numerous mines, and unceasing bombardment, the enemy never succeeded during all this time in gaining a foothold in any of the outposts. There were, it is said, several points at which entry could have been effected without serious difficulty; but, providentially, the mutineers feared that they were mined, and no attack was directed against them.

In the entrance hall of the Residency, a marble tablet tells the story, in simple language, of those tragic and glorious eighty-seven days. Lord Canning, it reminds us, expressed his admiration of the defence in the following words: "There does not stand recorded in the annals of war an achievement more truly heroic."

At the top of the steps leading down to the *taikhana* or underground rooms, in which the women and children of the 32nd were lodged, is a tablet in memory of Lady Inglis, who died in 1904. She was the daughter of the first Lord Chelmsford, who was Lord Chancellor in 1858-59 and 1866-68, and was therefore the aunt of the

third Lord Chelmsford, who was Viceroy from 1916 to 1921. Rees in his *Personal Narrative* relates that when the Residency was evacuated, the ladies had to walk six miles. Lady Inglis walked with them and refused to use the dhooly which had been prepared for her. There is no mention of this incident in her own published diary.

A tablet on the E. veranda wall of the Women's Quarters records the death during the siege of Miss Palmer, the young daughter of Col. Palmer of the 48th B.I., who was in command at the Machhi Bhawan. She was killed by a cannon ball on the 1st July.

On the first storey in the N.E. angle of the building is the room in which Sir Henry Lawrence received his fatal wound on the morning of the 2nd July from a shell fired from the howitzer lost at Chinhat. He had been advised to abandon the room after a shell had burst in it on the previous day without injuring him or his secretary, Sir George Couper; but he refused, saying that the enemy's gunners were not good enough to put a second shell in the same room. He was taken to Dr Fayer's house, and there he died.

The Residency lay in the centre of the position S. of the river front and W. of the Banqueting Hall. With its lofty rooms, fine verandas, and large porticoes, its range of subterraneous apartments, its ground floor and two upper storeys, it afforded accommodation to nearly 1000 persons—men, women, and children. The N. or river front in 1857 faced a row of buildings forming a street which was known as Captain Bazar; the low land between was treated as neutral ground. In the centre of the N. face was the **Redan**, armed with two 18-pounders and a 9-pounder, which commanded the whole river-side and the opposite

bank ; on its W. side was Evans' Battery, with one 18-pounder and two 9-pounders. Just E. of the Redan was the **Water Gate**, beyond which a defence of fascines and sandbags ran to the Hospital, formerly the Banqueting Hall ; the Water Gate had a battery of three guns, with Alexander's Battery on its right, and the Hospital one of three mortars. At the N.W. corner, on a spur, running out above the depression in which the church and graveyard were situated, was **Innes' Post**, so named because the bungalow was the residence of Lieut. M'Leod Innes of the Bengal Engineers (afterwards a Lieut.-General and V.C.).

Every spot in the Residency is interesting, but the most interesting, if the saddest of all, is the **Cemetery** round the ruined **Church** ; both are to the E. of Innes' Post. Here Sir Henry Lawrence, Brigadier-General Neill, and so many brave men and women and hapless children, to the number of nearly 2000, sleep their last sleep. General Neill's grave is on the S. side of Sir Henry Lawrence's, which is enclosed by an iron railing, and bears the well-known inscription :—

Here lies
HENRY LAWRENCE,
who tried to do his duty.
May the Lord have mercy on his soul !
Born 28th of June 1806.
Died 4th of July 1857.

We now come to the W. front of the defences and the **Slaughter House** and **Sheep House Posts**, the latter immediately S. of the church depression. Next in order are **Grant's Bastion**, **Gubbins' House** (the residence of Mr Martin Gubbins, the Financial Commissioner) and **Gubbins' Battery**, with a 9-pounder, which defended the W. angle. The S. portico of Gubbins' House was completely covered by the famous "Lane

Gun," behind the house of the younger Johannes. Between Gubbins' House and the Begam Kothi, and S. of the Residency lawn, was **Ommanney's House** (the residence of Mr M. C. Ommaney, the Judicial Commissioner, who was killed on the 5th July by a cannon ball in the Redan). General Havelock made this house his headquarters after the first relief, and used every morning to walk from here round the whole entrenchment. Under a banyan tree near the gate is the grave of Rukn-ud-daula, a son of Sa'adat Ali, who was suspected of correspondence with the mutineers, and with four other prisoners was confined in one room on the N. side of the Banqueting Hall. The **Begam Kothi** was so called from having been the residence of a European wife of a King of Oudh, and is distinguished by its pretty mosque. It sheltered many women and children and escaped serious injury. The entrenchment turns sharply inwards at Grant's Bastion, and on the other side of a narrow lane, which was closed and protected by a 24-pounder howitzer, were the **Sikh Squares** and the **Brigade Mess** (or King's Hospital). In the Brigade Mess buildings were the rooms occupied by Lady Inglis and Lady Couper. E. of these are **Duprat's Post**, held by a brave French merchant who had served with the French Army in Algeria ; and behind it the **Martinière Post** ; in front, outside, at a distance of only 30 yds., was **Johannes' House**. Four mines of the enemy were exploded between Duprat's Post and the S.W. corner of the Sikh Square. Behind the Martinière Post was the Indian Hospital, and at the rear of Duprat's House was the **Thagi Jail**, which was used as a convalescent depot. At the S.E. corner of the defences were **Anderson's Garrison** and the **Cawnpore Battery**, mounting an 18-pounder and two 9-pounders ; these were the two most dangerous

posts of all, being specially exposed to the fire of Phillips' Garden Battery.¹ The well still exists from which a counter-mine was run and exploded with 20 enemy casualties. The **Post Office**, was a very important position, commanding the jail and mosque to the right, and the Clock Tower and offices of the Terhi Kothi to the left, outside the entrenchment, and was armed with three guns. It was the headquarters of the Artillery and the Engineers. In front of it, on the part of the E. face projecting beyond the line of the Baillie Guard were the **Financial Garrison (Saunders' Post)**, **Sago's Post** (so called from the owner of the house here being a schoolmistress of that name), and the **Judicial Garrison** or **Germon's Post**. All these posts are marked on the ground by memorial pillars, which enable the outline of the whole defences to be fully understood. The posts to which the men of the 32nd were attached were: The Redan, the Cawnpore Battery and the Slaughter-house Post. The 71st and 48th Bengal Infantry defended the Hospital Post; the 13th B.I. the Baillie Guard,² the Sikh Infantry Germon's Post, and the Sikh Cavalry the Sikh Square. All the other posts were held by a combination of English and Indian soldiers and volunteers, generally in equal proportions, about thirty to each post. The Brigade Mess Post was garrisoned by officers. At the commencement of the siege, which began on the 30th June, the day after the battle of Chinhat, the garrison consisted of 730 British soldiers

(600 of His Majesty's 32nd Regiment, a company of H.M. 84th, and a handful of artillerymen), 76 British officers and 54 Indian officers, 150 civilian volunteers and 700 sepoys (of whom 250 were from the 13th Bengal Infantry, 43 from the 48th, and 117 from the 71st), making a total combatant force of 1480 officers and men.¹ The non-combatants numbered 2763; 237 women, 260 children, 50 boys from the Martinière School (p. 466), 27 Europeans and Anglo-Indians, and 700 Indians. On the 25th September, when the first relief was effected by Havelock and Outram, there remained 979 persons, of whom 577 were Europeans and 402 were Indians. The 32nd Regiment was reduced to 250 men; 170 or nearly half their casualties had occurred by the end of July.

The Quarters S. and E. of the Residency connected with the Reliefs.

On leaving the Residency enclosure, most persons will probably wish next to visit the buildings and sites to the E. of it connected with the reliefs by Sir Henry Havelock and Sir Colin Campbell. 150 yds. in front of the Baillie Gate, on a culvert near the intersection of the roads, a small brick pillar marks the site of the **Lutkun Darwaza**, or **Clock Tower**, from which the enemy kept up a constant fire on the E. of the Residency. Farther on, to the

¹ The site of this Battery, which was captured on the 25th October, is now occupied by the Balrampur Hospital. Opposite to it, on the W., is the Lady Dufferin Hospital for Women, which was opened by H.R.H. the Duke of Clarence on the 18th January 1890.

² The loyal remnants of the 13th, 48th and 71st Bengal Infantry were suitably rewarded and formed in 1861 into the "Lucknow Regiment," now the 10/7th Rajput Regiment.

¹ Colonel John Bonham, C.B., of the Bengal Artillery, the last surviving officer of the garrison, died in Ireland on the 18th May 1928, in his ninety-fourth year. When the present King and Queen visited Lucknow in 1905, he headed the small body of survivors who met their Majesties, and described the events of the siege. He was wounded three times. The heroic efforts made by him at the battle of Chinhat to save his howitzer would, says Col. Malleon in his *History*, have gained for him the Victoria Cross, if Sir Henry Lawrence had lived. But it was a shell from this very howitzer which killed Sir Henry.

right of the road, was the Jail, where the Court of the District Judge now is, while standing at a greater distance back on the left are the **Terhi Kothi**, now the residence of the Chief Judge of the Oudh Chief Court, and the **Farhat Bakhsh** ("Delight-giving") Palace. The last designation originally included not only the above buildings, but also those of the **Chhattar Manzil** Palace beyond, which constituted the ladies' apartments so long as the **Farhat Bakhsh** was the principal residence of the Oudh Kings—from Sa'adat 'Ali Khan down to Wajid 'Ali Shah. S.E. of the Jail was the **Painbagh**, (now occupied by the Chief Court building), E. of which projected the S. portion of the **Chhattar Manzil** enclosure, containing the small **Chhattar Manzil**, the **Kasr-i-Sultan**, or the **Lal Baradari**, and the **Darshan Vilas**. It must be remembered that in 1857-8 these buildings did not stand separate and in the open, as they now do, but were all enclosed and divided off by high walls of great strength.

Both the **Chhattar Manzils** are surmounted by an umbrella (*chhattar* or *chhattri*), whence their name. The larger, on the bank of the river, is used now as a club, and the smaller as Government offices. After the relief of the 25th September 1857, the British position was extended from the Residency eastwards as far as the **Chhattar Manzil**. Near this, opposite the **Kaisarbagh**, is the marble memorial statue of the Queen-Empress Victoria under a canopy. The **Kasr-i-Sultan** was the throne-room in which the widow of **Nasir-ud-din Haidar** attempted to compel the Resident, Colonel Low, to place her son, born before the King married her, on the "masnad." Its other name, **Lal Baradari**, is due to the colour of the material, red sandstone, of which it is con-

structed. A little beyond these buildings is the **Telegraph Office**, and N. of it the **Sher Darwaza** gateway of the **Dhooly Square**, where General Neill was shot on 25th September 1857. At this spot a masonry pillar has been erected, bearing a tablet with a suitable inscription and the words, *Dulce et decorum est pro patriâ mori*. E. again, and opposite the N.E. corner of the **Kaisarbagh**, was the **Hiran Khana**, or **Deer House**, between which and the river and the road to the modern **Bruce Bridge** were the engine-house, stables, and sergeant's house, all of which played a part in the reliefs. **Neill Road**, which has been followed to the **Sher Darwaza**, now continues to **Hazratganj** past the N. front of the **Kaisarbagh** and the **Memorial** in front of the N. gate which marks the spot where two small parties of European refugees from **Sitapur** were shot on 24th September and 16th November.

The fine stone tombs of Sa'adat Ali and his wife in the **Kaisarbagh** were constructed by his son, **Ghazi-ud-din Haidar**; and the palace was built between the years 1848 and 1850 by Wajid 'Ali Shah with the utmost extravagance and in the vilest of taste. It was from the fire from the defences of the palace and the roofs of the tombs that the relieving force suffered so much in finally reaching the Residency, both in September and in November 1857. The building to the S. of the tombs was used until recently as the meeting-place of the Provincial Legislative Council. It was erected to accommodate the **Canning College** (now at **Badshahbagh**, p. 467). The palace originally had one gate at the S.E. and two others on the N. and S. and its interior was divided into courts. The open square is still surrounded, except on the N. side, by double-storeyed buildings, with columned fronts and veran-

das. The whole of these buildings have been made over to the Talukdars of Oudh. In the centre is a white-washed baradari, which is used as a hall for meetings of the Talukdars. It contains a portrait of King Edward, presented by him on the occasion of his visit in 1876, and statues of Maharaja Man Singh, Colonel Lousada Barrow (Chief Commissioner of Oudh in 1860), Lord MacDonnell, Maharaja Sir Dirigbijai Singh of Balrampur (the donor of the building), and Sir John Woodburn; the two last are by Sir W. Goscombe John, R.A. S.W. of this central Baradari is the **Public Library**, in a new building erected by the present Maharaja of Mahmudabad (a prominent Muhammadan Talukdar) in memory of his father. The entrance from the E. and W. is made by the *Lakhi Gateways*, so called from the lakh of rupees which their erection cost. To the right outside the W. gateway is the **Kaisar Pasand** (now used as the Deputy-Commissioner's Court), which was built by Roshan-ud-Daula, the minister of Nasir-uddin Haidar and given by Wajid Ali Shah to one of his harem favourites. On leaving the central courtyard by the E. gateway, Hazratbagh is entered: the *Chaulakhi*, the large pile on the right, was built by Wajid Ali's barber, and sold to him for four lakhs: hence the name. Much of the concealed jewellery of the ex-King was taken from the Kaisarbagh to the Residency in May 1857, and was largely stolen there.

In the Lal Baradari (the building between the Chhattar Manzil and the Chief Court) is the Provincial **Museum**¹ of which the archæological section is the most important. The large hall contains sculptures, the majority from Mathura (Mutra), which are partly Buddhist and partly Jain. The adjoining

room is reserved for Brahmanical sculptures from different parts of the Province.¹ A special room has been set apart for the antiquities excavated on the site of Saheth-Maheth (p. 429), the ancient city of Srāvasti, and the famous convent of the Jetavana. The various objects from Kasia (believed to be the ancient Kusinagara, where the Buddha entered Nirvāna) are also exhibited separately. The epigraphical section contains numerous Sanskrit inscriptions both on stone slabs and on copper plates. The important coin collection is only shown to visitors on application to the Curator. The Museum contains also a zoological section, which includes a good collection of stuffed birds. An illustrated catalogue of the archæological section is desirable for reference.

Proceeding now by Clyde Road, the first building seen on the left is the **Moti Mahal**, with Martin's House,² between it and Bruce's Bridge.³ It lies on the left side on the bank of the Gumti. The three-storeyed gateway on the S. collapsed during the floods of 1923, and has been replaced by a fine Italian wrought-iron gate; the old walls are also gone, and a railing now surrounds the enclosure. The building itself is two-storeyed, of a blue colour, and surmounted by a gilt pinnacle. Originally it comprised also the Mubarak Manzil and the Shah Manzil, from which the King used to watch the fights between wild animals on the farther side of the river. The Moti Mahal was built by Sa'adat Ali, and the other two by Ghazi-ud-din Haidar. It was at the Moti Mahal that General Havelock's rear-guard

¹ See No. 11, *Memoirs Arch. Surv. of India*, 1922, by Pandit Hirananda Shastri.

² Simon Nicolson Martin was Deputy-Commissioner of Lucknow in 1857.

³ Sixty yards E. of this bridge, which was built in 1863, was the Bridge of Boats, over which the mutineers escaped after Havelock's capture of the Moti Mahal.

1 Closed on Fridays.

remained on 25th September, and Sir Colin Campbell's force came into actual touch with the besieged on 17th November. To the right side of the road, standing on a high site, the base of which is still surrounded by defensive works, is the **Khurshid** ("Sun") **Manzil** built by Sa'adat Ali and named after his wife. It was used before the Mutiny as the Mess-house of the 32nd, and since 1876 has been occupied by the Girls' Martinière School. S. of it again is the **Tarawali Kothi**, or Observatory, now the Imperial Bank of India. This was built by Nasir-ud-din Haidar for his Astronomer-Royal, Colonel Wilcox. On the occasion of the relief of November 1857 the Khurshid Manzil was strongly held by the enemy, and barred the way of the relieving force for some time, but, after being subjected to a heavy bombardment by the Naval Brigade and Mortar Battery for three hours, was taken by the 53rd and 90th. A marble tablet at the S.W. corner of the garden wall records that, about twenty paces away, was the gap through which Generals Outram and Havelock passed to meet Sir Colin Campbell on the 17th November 1857. In March 1858 the enemy's second line of defence ran from the river at the Moti Mahal, past the Khurshid Manzil and Tarawali Kothi, to the Chota (Hazratganj) Imambara. 500 yds. E. of the Moti Mahal and Khurshid Manzil stand the Shah Najaf and Kadam Rasul, and nearly 1000 yds. on again lies the Sikandarbagh, round which such desperate fighting took place in November 1857. **Shah Najaf** (named after the scene of the martyrdom of the Caliph Ali, 120 m. S.W. of Baghdad) is the tomb of Ghazi-ud-din Haidar Khan. It is surmounted by a dome, and surrounded by walls of such immense thickness that neither the heavy guns of the Naval Brigade nor those of Captain Middleton's Battery, brought quite

close up, were able to make any impression on them, and the advance was severely checked here until some soldiers of the 93rd managed to scramble up a broken part of the wall at the back, and found that the enemy had just fled to avoid being caught like their comrades in the Sikandarbagh. Some of the defenders made use of bows and arrows—for the last time, probably, in Indian warfare. Sergeant Paton received the Victoria Cross for the part he took in this escalade. An English midddy, Martin Abbott Daniel, was killed serving his gun outside Shah Najaf. The decorations and contents of the interior, though tawdry, are curious; one picture (copied by an Indian artist from Zoffany's famous picture) represents a cock-fight, at which the King of Oudh and General Claude Martin are present. The building is illuminated during the Muharram festival.

The **Kadam Rasul** is now a ruined building of red brick. It was built in 1830 and was used by the mutineers as a powder magazine. The stone containing the imprint of the Prophet's foot, which it contained, disappeared in 1857; it is approached by a path through the garden to the E. of Shah Najaf, and has a fine view. The picturesque Horticultural Gardens now lie between these buildings and the **Sikandarbagh**, through which the road to the bridge across the river near this point leads. The gateway of the garden, which is 120 yds. square, still stands; in front of it was a sarai, which was easily captured by the troops on 16th November 1857, but a breach¹ in the thick

¹ According to Sergeant Forbes Mitchell, the breach in the wall of the garden, which was wide enough to admit three men abreast, was made at the spot where the road to the river now passes through it, and the 53rd got into the enclosure through a window to the right of the gate. Private Dunlay of the 93rd received the Victoria Cross as the first man who penetrated into the garden and survived the desperate conflict in it.

wall of the Sikandarbagh was made only with great difficulty, and was carried by the 93rd, 53rd, and the Sikhs of the 4th P.I. The defenders, upwards of 2000 men, and forming a compact brigade of three regiments, were killed to a man. "Never was a bolder feat of arms," wrote Sir Colin Campbell of it. The 93rd lost 90 killed and 99 wounded; the dead were buried in a trench, still marked by a mound to the E. of the gate. None of these three posts were held by the enemy in September 1857, and all of them were abandoned with the first line of defence in March 1858. From the Sikandarbagh the lines of the two reliefs and the capture diverge. Sir Colin Campbell's two advances were made from the Martinière and Dilkusha, to the S.E. of the Wingfield Park, while Generals Havelock and Outram pushed up to the Sikandarbagh from the S., along what is now known as Outram Road, which passes N. of the Wingfield Park and S. of the **King's Chaupar**, or Cross Stables (now Lawrence Terrace), which were used before the Mutiny as barracks for the 32nd Regiment. Just before the junction with Banks Road is the new **Council Chamber** of the Legislative Council of the United Provinces. To the S. of it is Government House, formerly Banks' House, and originally the Hayat Bakhsh ("lifegiving") Kothi. The Hayat Bakhsh was occupied after the annexation of Oudh by Major Banks, the Commissioner of Lucknow, who was killed in the Residency. Major Hodson died here after receiving his fatal wound at the Post Office (Begam Kothi). It dates from the time of Sa'adat Ali. Outram Road now joins Havelock Road, which marks up to the Charbagh (Junction railway station) the route along the canal followed by the troops in their advance from the Cawnpore Road on 25th September 1857.

At the N.W. corner, outside Government House, is *Christ Church*. It is a neat building with a tower. The church compound is prettily laid out with many flowers and creepers. There are a number of interesting tablets on the walls. Those in memory of Sir James Outram and Sir H. Lawrence deserve particular attention.

Wingfield Park is well laid out, and is adorned with many white marble pavilions and statues, and has a large pavilion in the centre, surrounded by 80 acres of grounds and flower-gardens. It is named after Sir C. Wingfield, Chief Commissioner of Oudh (1859-66).

Hazratganj, which leads to the N. from Government House, was the route of the rear-guard in September 1857, when, after holding the Charbagh Bridge for several hours, it marched to join the main column in advance of it. A few hundred yds. up it on the left side the Post Office occupies the building of the Sultan Inaiyat, a portion of the **Begam Kothi** property—once the residence of a Queen of Amjad Ali Shah—taken with much slaughter of the enemy on 11th March 1858. It was here that Major Hodson was mortally wounded. To the S. of the Post Office is the **Dar-us-Shafa Kothi**, now occupied by the Secretaries to Government. It takes its name ("House of Healing") from the fact that from 1822 to 1844 it was used as a hospital. Nearly $\frac{1}{4}$ m. from the Post Office is the **Chota Imambara** or **Hazratganj Makbara**, the tomb of Amjad Ali Shah, which was captured on 14th March—a feat which led to the occupation of the whole of the enemy's lines of defence at Lucknow. The interior, which once contained the most sumptuous fittings, is now neglected and dirty; but the garden court in front is rather

pretty. Until the completion of Christ Church in 1860, Anglican services were conducted here. Beyond the Imambara is the high-standing **Nur Bakhsh** ("light-giving") **Kothi**, now the official residence of the Deputy-Commissioner of Lucknow. It was from the roof of this house that General Havelock in his advance to the first relief, overlooked the enemy's third line of defence and worked out his way to the Residency. A little farther N. the S.E. corner of the Kaisarbagh and the Memorial in front of it are reached.

The Quarters S. of the Railway Line connected with the Reliefs.

The scenes of the operations of the relieving forces before Lucknow may now be completed by a visit to the Martinière, the Dilkusha, and the Alambagh, the original base of each one of the reliefs. A pretty road, striking off to the left from Park Road, which is a continuation of Hazratganj, and skirts the W. side of the Wingfield Park, leads through the Martinière Park to the buildings in it. Not very far from these will be seen two small grave enclosures, and in one of these will be found the grave of Major Hodson of Hodson's Horse, killed on 11th March 1858 (see p. 465).

The **Martinière School** is housed in **Constantia**, an irregular building, in a sort of debased Italian style. This was the country residence of Major-General Claude Martin (1735-1800), who built it partially from designs of his own. It is an enormous structure, consisting of a central block and two semi-circular wings. The main building is five-storeyed and is bastioned, and loopholed. The basement storey is raised to a good height above the ground, and has extensive wings, but the superstructure is bizarre, and has been styled "a

whimsical pile." There is, however, something striking in its great central tower, and Fergusson has observed that the building contains the germ of a very beautiful design. From a distance the appearance is not undignified, but it is easy to understand, on close inspection, how the strange array of statues on the roof led the Marquess of Hastings to pronounce that the idea was taken from a castle of pastry. Martin's tomb, restored in 1865, is in the E. crypt of the chapel; the plain sarcophagus was once guarded by a marble grenadier, with arms reversed, at each angle. To the E. of the building is a fine lake, in the centre of which rises a fluted masonry column 130 ft. in height.

General Martin was the son of a cooper, or a silk manufacturer, at Lyons, and served as a soldier under Lally in the regiment of Lorraine. He and some of his comrades formed a company of Chasseurs under Law, and garrisoned Chandernagore till taken by Clive. He then entered the British army, and rose to the rank of captain. In 1776 he entered the service of the Nawabs of Oudh, but the British Government allowed him to retain his rank and to enjoy promotion. In 1783 he formed the acquaintance of De Boigne, and took part with him in cultivating indigo and lending money to the Nawab, by which he acquired a large fortune. It is said that Asaf-ud-daula offered him £1,000,000 sterling for the Martinière, but the Nawab died before the bargain was completed, and General Martin himself, dying at the Farhat Bakhsh before the building was finished, directed it should be completed out of the funds left to endow a school in it. This school is now one of the best in all India for the education of children of European descent, whose parents are permanent residents in the country, or who hold subordinate positions in

the Government service.¹ There are similar institutions endowed by Martin at Calcutta and Lyons. The advance on the Martinière in November 1857 met with strong resistance by the rebels. It was held by them again in March 1858, and it was in the attack then made on it that Sir William Peel was wounded by a musket-ball.

The **Dilkusha**, or "Heart-expanding," was a villa built by Sa'adat 'Ali Khan in the midst of an extensive deer-park. It stands about $\frac{3}{4}$ m. to the S. of the Martinière across the railway, and is now a ruin, but a very picturesque one. It was captured on the 12th of November 1857 by Sir Colin Campbell, and here twelve days later General Havelock expired, with the knowledge that the whole garrison of Lucknow had been safely rescued from the Residency. On the occasion of Sir Colin Campbell's second advance it was occupied on the 2nd March. After the Mutiny it was for some years used as a residence by the General commanding the Oudh Division, but the structure was pronounced to be unsafe and was partially demolished. The grounds have been laid out as a flower-garden. There are some tombs of British officers in the adjoining ruins of the **Wilayati Bagh** (to the E. on the river-bank), which was originally a zenana garden made by Ghazi-ud-din Haidar in the European style; whence its name.

About $1\frac{1}{2}$ m. due S. of the Charbagh (Junction railway station), on the Cawnpore Road, is the **Alambagh**, with the grave and memorial of General Havelock. It was first taken by that General on 23rd September 1857, was occupied by a detachment left behind with the baggage and wounded till the arrival of Sir Colin Campbell on

12th November, and was held by Sir James Outram and his force of 4500 after the evacuation of the Residency from 27th November 1857 till March 1858. It is a walled enclosure 500 yds. sq. and was built by Wajid 'Ali as an occasional residence for a favourite wife. General Havelock's tomb is surmounted by an obelisk 30 ft. high, with an inscription recording his death on the 24th of November 1857.

Quarters N.W. of the Residency and across the Gumti.

Five hundred yards to the N.W. of the Residency is the **Iron Bridge**, across which our troops passed to the fight of Chinhat, and again retreated from it, and over which General Outram passed on 16th March 1858. It was designed by Rennie, and sent out from England at the end of the 18th century, but was not erected till 1840-4. From it there is a beautiful view of the Farhat-Bakhsh-Chhattar-Manzil Palace.

Across the bridge to the right is the **Badshahbagh**, from which the enemy kept up a severe fire on the Residency, and from which the shell which caused the death of Sir Henry Lawrence came. It was taken by Sir James Outram on 8th March 1858. Of the three buildings of which it was composed, only the Red Baradari remains, a well-proportioned house with a broad veranda and a painted ceiling supported by columns on the N. side which looks out on to a long tank. The gateways are also still standing. It was given to the Raja of Kapurthala in 1858, and was purchased from him for the **Canning College**, built at a cost of 5½ lakhs, of which 1½ were given by the Maharaja of Balrampur. Farther on, at Hassanganj, the Fyzabad road turns to the right and leads to the Kokrail Bridge and (3 m.) Ismailganj, $1\frac{1}{2}$ m. in

¹ "Kim," the hero of Mr Kipling's well-known story, was sent to school at the Martinière.

front of **Chinhat** ($6\frac{1}{2}$ m.). The main road to Sitapur proceeds N. to the old Cantonment of **Mariāon** ($2\frac{1}{2}$ m.); of this nothing survives except the ruined walls of a few houses.

1200 yds. W. of the Residency is the **Great Imambara** of Asaf-ud-daula, which is built on the W. slope of the **Machhi Bhawan**¹ enclosure. The fort was rebuilt after the Mutiny and fortified, but dismantled in 1877, and nothing now remains of it except the high site to the E. of the Imambara. It once extended 800 yds. along the road and 500 yds. to the S. of it, while the N.W. end reached almost to the river-bank above the old stone bridge, which crossed the Gumti opposite the centre of it. The major portion of the site is occupied by **King George's Medical College and Hospital**, of which the foundation-stone was laid by King George V., as Prince of Wales, on 26th December 1905. The cost of the whole building, which was completed in 1912, was 33 lakhs, and includes a hospital with 230 beds, a hostel for 200 students, a nurses' home, cottage wards, etc. With the Canning College and the Isabella Thoburn College for women, the Medical College has since July 1921 formed part of the **Lucknow University**. It is proposed to erect a Convocation Hall on the bank of the Gumti, opposite the **Chhattar Manzil**. The stone bridge built by Asaf-ud-daula, which crossed the Gumti at this point, was replaced in 1912 by the **Hardinge Bridge**, and a wide road has been constructed, which leads into the Sitapur Road past the **Karbala of Mohsin-ud-daula** and the unfinished Karbala, where his grandfather, Nasir-ud-din (died 1837), is buried. Near the bridge, and on the same side of the Gumti

as the Medical College and Imambara is the so-called **Mosque of Aurangzeb**, built on the Lakshman Tila or Mound, which is believed to have been the centre of the original settlement of Lucknow. Between the Machhi Bhawan enclosure and the N. gate of the Chauk, is **Victoria Park**, which contains a bronze statue of H.M. Queen Victoria. The Imambara court is entered by a fine gateway on the left of the road; though the details will not bear inspection, the great courtyard, with a lofty mosque and two minarets on the W. side, and the immense structure of the Imambara at the head of steps on the S. side, is decidedly fine. It was built by Asaf-ud-daula in 1784, partly to afford relief in the terrible famine of that time, which swept over all N. India. The great central hall, which contains his unpretentious tomb, is 163 ft. long, 53 ft. broad, and 49 ft. high, and is one of the largest vaulted galleries in the world.¹ It has a number of tawdry fittings in it, which have taken the place of the splendid articles described by Bishop Heber. European gentlemen are requested to remove their hats in the hall. At the end of the road-way passing in front of the Imambara is the **Rumi Darwaza**, or Turkish Gate, built, probably, on the analogy of the Sublime Porte, though not in the least resembling it; it is much disfigured by absurd decoration. 1000 yds. again beyond this gate is the **Husainabad Imambara**, and opposite it, on the N. side of the road, a beautiful garden, with the **Husainabad Clock Tower** and **Tank** and the **Satkhandā**, or seven-storeyed tower. The Imambara, which was built by Muhammad 'Ali Shah, 1837 A.D., and contains the tombs of himself and his mother, consists of two large enclosures, one of which is at right

1 "Fish House," so named after the fish which Safdar Jang was permitted by imperial edict to use as his badge.

1 Fergusson's *East. Arch.*, 2, 328-329.

angles to the other. It stands in a large quadrangle, which has a marble reservoir of water in the centre. One building is a mosque, the other purports to be a copy of the Taj; but both are grotesque. The hall is filled with mirrors and chandeliers, and contains the throne of the King, covered with beaten silver, and his wife's divan, with solid silver supports. Both the Imambaras, and also the Shah Najaf, are illuminated with thousands of oil lamps during the Muharram festival. The seven-storeyed watch-tower, of which only four storeys were built, was commenced by Muhammad 'Ali Shah, but interrupted by his death. The octagonal tank is an extremely fine and picturesque work. On the N. side of it is a Baradari, now the offices of the Husainabad Trust, with portraits of most of the Kings of Oudh; and behind that was the **Daulat Khana**. This was the palace of Asaf-ud-daula, and one of the houses which remain is known as the Asafi Kothi. The Clock Tower, to the W. of the tank, was built in 1881, and is 220 ft. high. Farther again to the W. rises the **Jami Masjid**, begun by Muhammad 'Ali Shah, and finished by his wife; perhaps the most satisfactory specimen of Oriental architecture in Lucknow. It has three domes and two minarets, and stands on a high platform, approached by flights of steps. Rather more than 2 m. N.W. of Husainabad and beyond the waterworks pumping station on the Gumti, is the **Musa-bagh**, which is deserving of a visit, though the last $\frac{1}{4}$ m. to it must be accomplished on foot, on account of the magnificent brick walls which surround it. It was here that the first mutiny at Lucknow took place on 3rd May 1857, and it was here that the British cavalry under Col. Campbell failed to intercept the mutineers when finally driven out of Lucknow on 19th March 1858.

Quarter W. of the Residency.

To the W. of the Residency, and immediately to the S. of Victoria Park and the Medical College, is the N. gate (Gol Darwaza) of the **Chauk**, the principal street of the Indian city. There is another gate known as the Akbar Darwaza, at the other end. Barriers are set up at each end of an evening. A turning to the left at the S. end of the Chauk leads to Victoria Street.

In the grounds of the Medical College, at the top of Victoria Street, is the **Shah Mina**, a low construction of plastered brick with no architectural pretensions, but interesting on account of its importance in a popular cult. It is approached by a public pathway. Sheikh Mina, whose proper name was Sheikh Muhammad, is the great saint of Lucknow, where he was born. It is said that the Sheikhs (p. 449) colonised Lucknow at his suggestion. The date of his death, according to an inscription on his tomb, was 884 A.H., but elsewhere his death is recorded as having taken place in 870 A.H. (1465 A.D.). The tomb was partially destroyed during the Mutiny but has been restored. It is largely visited by persons in legal difficulties, who offer a piece of cloth; and on Thursday evenings the crowd is particularly great.

To the S.W. of the Chauk is the **Dargah of Hazrat Abbas**, which was the last stronghold of the mutineers in March 1858. It is reached from the Jami Masjid by going E. along Napier Street and then, turning to the right, down Sarai Mali Khan Road, past the imambara of Ilmas Ali Khan (entrance about 100 yds. down on the right). The shrine of Hazrat Abbas is about $\frac{1}{4}$ m. farther on. A tank occupies the centre of the courtyard, which is surrounded

with pillared porticoes. In the shrine is preserved the metal crest which is said to have surmounted the banner of Abbas, the relative of the Caliph Ali, who was killed in battle at Kerbela. The banners carried in the Muharram procession are brought to this building for consecration by touching the crest. Farther to the S.W. at the junction of Victoria Street and Aishbagh Road is the **King's Hospital**, which was originally in the Dar-us-Shafa Kothi (p. 465). The King's Poor House is close by. Both are supported from funds left for the purpose by Muhammad Ali Shah.

Before reaching the King's Hospital, a visit should be paid to a group of three buildings of the Mughal period, in a garden enclosure, on the Nadan Mahal Road which connects Victoria Street with Canning Street.

The **Nadan Mahal** is the tomb of Sheikh Abdur Rahim Khan, the first Governor of Oudh under the Emperor Akbar. The building dates from about the year 1600 A.D., and is a good specimen of early Mughal architecture. The whole building, from the plinth to the parapet, was originally of Agra red sandstone, some of which has, unfortunately, been stripped off. Its brackets are richly carved, and above the *chajja*, or projecting slab cornice, are traces of blue and yellow tilework. The dome was also covered with tiles, which have almost entirely vanished. Within are two marble sarcophagi, both bearing the *kalamdan*, or "pen-box," thus disproving local tradition, which assigns the less elaborate tomb to the Sheikh's principal wife. In the centre is a headstone elaborately carved with inscriptions from the Koran.

A few yards to the E. of the Nadan Mahal is a pleasing little red sandstone pavilion, known as the *Sola Khamba*, from the sixteen

pillars which support the roof; the brackets of the corner pillars are carved to resemble the head of an elephant. The pavilion contains five tombs, the two nearest the Nadan Mahal being of marble. Local tradition affirms that they are the tombs of the two other wives of the Sheikh, who are buried here, but one of them bears the *kalamdan*, again disproving the local tradition.

The tomb of **Ibrahim Chishti**, the father of Sheikh Abdur Rahim Khan, lies still farther Eastward, now open to the Nadan Mahal Road. It is composed of *kankar* blocks, and was originally plastered and painted. An inscription over the S. door gives the date of the death of Ibrahim Chishti as 1543 A.D.

These monuments are in happy contrast to the debased buildings that represent the taste in architecture shown by the Oudh sovereigns. The Nadan Mahal is built in what might be called the best Hindu-Mughal style, and would merit careful attention even at Agra or Delhi. The squalid purities that formerly surrounded these buildings have been removed, and a garden has been laid out around them, which forms a pleasant and shady retreat.

Cawnpore (45 m. by rail) should be visited either before or after Lucknow (for route, see p. 446). If the traveller has time at his disposal and is going South, he will find much to interest him at **Jaunpur** (p. 431), which can be reached (165 m.) from Lucknow Jn. in 6½ hrs. by the Howrah-Dehra Dun express. From Jaunpur the journey can be continued to **Benares** Cantonment (Route 5) and **Mughalsarai** (p. 54).

ROUTE 23.

(a) **CALCUTTA (Howrah)** by the East Indian Railway loop-line to **Lakhisarai** and **Mokameh** by **Nalhati Junction** (for **Azimganj**), **Tinpahar Junction** (for **Rajmahal**), **Sahibganj**, **Bhagalpur** and **Jamalpur** (for **Monghyr**).

(b) **Mokameh** by Bengal and North-Western Railway main line to **Tirhut** and **Cawnpore** *via* **Gorakhpur**.

(c) **CALCUTTA (Sealdah)** by Eastern Bengal Railway to **Plassey**, **Murshidabad**, **Lalgola Ghat** (for **Malda**, **Gaur** and **Pandua**), and **Katihar Junction** (for B. and N.W. Ry. main line).

(a) **Calcutta** by East Indian Railway loop-line to **Lakhisarai** and **Mokameh**.

Howrah (p. 109).

67 m. **Burdwan** (p. 67).

75 m. **Khana** junction (see p. 66). Here the loop-line branches off N. to

145 m. **Nalhati** junction station. Branch E. to **Azimganj City** and

27 m. **Azimganj Jn.** The **Bandel-Barharwa** (p. 67) line on the W. bank of the **Bhagirathi** passes through here. Opposite **Azimganj City Station** on the E. bank is **Jiaganj (D.B.)**, 1 m. from **Jiaganj Stn.** of the E.B. Ry., which is 5 m. above **Murshidabad**. There is also a metalled road from **Jiaganj** to **Murshidabad**. The population of the municipal area of **Azimganj** is 11,231 (1921). It is an important centre of the **Jains**. The **Bhagirathi** is here 700 ft. broad, and rises in the rains 25 ft., when the current runs 7 m. an hour.

195 m. from **Calcutta** **Tinpahar** junction station (R.H.).

A branch line runs N.E. (7 m.) to

Rajmahal station (staging bungalow), a sub-District of the **Santal Parganas**. The town stands on the W., or right, bank of the **Ganges**. It was once the capital of **Bengal**, and has many historical associations, while it affords opportunities of seeing some specimens of the remarkable tribe of **Santals**.¹

Up to 1592 A.D. it was known as **Agmahal**, but when **Raja Man Singh** (p. 224), **Akbar's** famous **Rajput** general, returned from the conquest of **Orissa** in 1592 A.D., he made it the seat of his Government, and changed its name to **Rajmahal**. In 1607 **Islam Khan** transferred the seat of Government to **Dacca**, but it was again brought to **Rajmahal** by **Sultan Shuja** in 1639. In the beginning of the next century **Murshid Kuli Khan** transferred the Government to **Murshidabad**, and **Rajmahal** fell into decay. In 1863 the **Ganges** abandoned its channel, and **Rajmahal** was left 3 m. distant from the main stream, and this finally completed the fall of the place. The river has since returned to its old bed, but **Rajmahal** has ceased to have any commercial importance.

Just beyond the ry. station is the tomb of **Miran**, the son of **Mir Jafir** (p. 477), who died here in 1760.

N. of the station are the sub-Divisional Officer's Court (formerly the **Mughal Governor's** house) and other public buildings. A little farther on are remains of a building called the **Sangi Dalan** ("Hall of Stone"). It is 100 ft. long from N. to S., and has three doors of black basalt in the centre. This is said to have been part of the palace of **Sultan Shuja**, son of **Shah Jahan** and Governor of **Bihar**.

¹ See *The Story of an Indian Upland*, by **F. B. Bradley Birt** (Smith Elder, 1905).

The *Maina Tank* is $\frac{1}{2}$ m. due W. of the *Cutcherry*. At its S. end is a massive brick building, with an Arabic inscription; and 100 yds. to the S. is the Maina Mosque. There is a tomb of a Maina Bibi.

The *Hadaf* is 4 m. to the N.W. The road leads through a forest of tall trees, with ruined buildings at intervals. At $1\frac{1}{4}$ m. it passes a solid brick building on the right hand, called the Tanksal, or Mint, with walls $5\frac{1}{2}$ ft. thick. The Hadaf ruins are about 200 yds. off the road to the left, and are much hidden by the jungle. The entrance to the quadrangle is by the E. gateway, which is much injured. The mosque proper has a façade 200 ft. long, with seven arches, each 22 ft. high. In the centre of the quadrangle is a reservoir, with steps down to the water. The buildings are surrounded by dense jungle, but the actual structures have been cleared.

The journey to English Bazar, the headquarters of the Malda District, 24 m. distant, formerly made by road from Rajmahal is now made by railway from Murshidabad (p. 480) in 8 hrs. or from Katihar in $3\frac{1}{2}$ hrs. (p. 483).

From Tinpahar station the loop-line continues N. to

219 m. **Sahibganj junction**, (D.B. and waiting-rooms, for Manihari Ghat and Katihar, across the Ganges, on the E.B. Ry. It is becoming a centre of trade. The industries are *sabai* grass (for paper manufacture) and oil-mills; there are stone quarries near. **Katihar** is the junction for the Bengal and N.W. Railway main line (530 m.) to Cawnpore.

265 m. **Bhagalpur** (D.B.) (population 68,878), headquarters of a Division and District in the Province of Bihar and Orissa, picturesquely situated on rolling ground on the S. bank of the Ganges. There is a monument

here to Augustus Cleveland, who at the end of the 18th century reclaimed the Santals from savagery and robbery. Ferry and branch line to (23 m.) Thana Bihpur on B.N.W. Ry. Branch line also (31 m.) to **Mandar Hill**, 700 ft. high. Vishnu is said to have cut off the hand of Madhukaitab, a giant, and to have piled this hill over him. For a mile or two round its base, numerous tanks and several old buildings are to be seen; also some stone figures. On the summit is a spring, *Akash-ganga* (river of the sky), to which the only access is by a wooden ladder about 15 ft. high: on the left of the spring the colossal figure of Madhukaitab is traced on the rock.

280 m. **Sultanganj**; famous for its Temple of Gopinath, which is built on a rock in the middle of the Ganges, and is reached by a ferry.

298 m. **Jamalpur junction** (R.). The town is situated at the foot of the Kharagpur hills. It is purely a railway settlement; about 10,000 persons are employed in the E.I.R. locomotive engineering workshops, which were originally established here in 1862, and are now the largest in India. Branch line to, $5\frac{1}{2}$ m.,

Monghyr, hdqrs. of a district (D.B.), (pop. 46,825). The Civil Station is most picturesquely situated inside an old Mughal fort, to which Mir Kasim fell back from Murshidabad in order to be farther from the overwhelming influence of Calcutta. The place is still noted for the manufacture of arms and ebony work. There is a large cigarette factory of the Peninsular Tobacco Co. Within the fort, towards its N.W. corner, a rocky spur projects into the river, on the edge of which are several picturesque temples; there are few bits of river scenery in India which are

more pleasing than this. Ferry and branch line to Sahibpur Kamal, on B.N.W. Railway; thence E. to Katihar, and W. to Barauni, for Chapra (p. 474).

There are several places of interest in the immediate vicinity of Monghyr. Three miles to the E. is the hill called Pirpahar, on which stands a magnificent house, said to have been built by Mir Kasim's Armenian General, Gurgin Khan. A little to the S.E. of this are the sacred hot springs of Sitakund. About 2 m. S. of Monghyr is the Dakra Nala where are to be seen the remains of an ancient bridge which was blown up by Mir Kasim in his retreat before Major Adams (1763).

Cleverly designed silver fishes are manufactured at Kharagpur (D.B.), 20 m. S.W. of Monghyr. Motor service available. This place has beautiful scenery.

326 m. **Lakhisarai** (Kiul junction) for the main line (p. 66).

347 m. from Calcutta by loop-line, **Mokameh Jn.** (p. 66). Branch to Mokameh Ghat.

(b) From **Mokameh** by the B. and N.W. Railway main line, to **Tirhut** and Cawnpore, *via* **Gorakhpur**.

Mokameh Ghat is the starting-point for the Ganges ferry steamer to Semaria Ghat and the branches of the Bengal and North-Western Railway, connecting the whole country between Oudh and the Teesta River with the S. bank of the Ganges. From Semaria Ghat by train to

6 m. **Barauni**. The main line from Cawnpore runs E. to **Katihar** (112 m.), with branches to the river opposite Monghyr, Bhagalpur, and Sahibganj, and W. to Hajipur (54 m.), Sonapore (57 m.), and Chapra (90 m.). **Sonapore** is well known for its Fair

in Oct.-Nov., attended by 200,000 people. There are usually 400-500 elephants for sale. Formerly there was a large annual gathering here of planters from Tirhut. For stations beyond Chapra on this line see p. 474.

A branch line runs from Sonapore to Palezaghat (8 m.), from which a steamer crosses the Ganges to Dighaghat for Patna Jn. (p. 65).

The main line to Tirhut proceeds from Semaria Ghat to **Samastipur** (38 m.), from which one branch runs *via* **Darbhanga** (24 m. N.) to Narkatiagunj (119 m. farther N.W.) and Bagaha (26 m. W.), and thence to Gorakhpur (63 m. S.W. in the United Provinces). Another branch line from Samastipur to Rusera Ghat (18 m. S.E.) and thence to Khagaria (37 m.) and (59 m.) Mansi.

Darbhanga is the residence of the Maharaja of Darbhanga, who is of Brahman descent and one of the largest landlords in Bengal, Bihar and Orissa. The title of Raja was granted to the family in 1700 and of Maharaja in 1839. Sir Rameshwar Singh, the present Maharaja Bahadur, was a member of the Executive Council of the Province of Bihar and Orissa. The palace is a very fine building and the city (population 53,700) contains a number of very large tanks. The Govt. Offices are situated at Laheria-Sarai (good D.B.), which is within the Darbhanga Municipality and 3 m. by rail from Darbhanga station. Motor-cars and supplies are obtainable at Laheria Sarai. Samastipur (D.B.) and Madhubani (D.B.) are the headquarters' stations of the two subdivisions of the District. At Rajnagar there is a magnificent palace built by the present Maharaja. There are two European Clubs, one at Laheria-Sarai and the other at Samastipur.

From Darbhanga a branch line runs to Sakri (12 m. N.E.),

Bhaptiahi (42 m. E.) and **Partabganj Ghat** (12 m. E.) in District **Bhagulpur**. There is a branch line from **Sakri** to **Madhubani** (10 m. N.) and thence to **Rajnagar** (6 m.) and **Jainagar** (13 m.) on the **Nepal** frontier.

From **Samastipur** the main line to **Tirhut** runs to **Muzaffarpur** (32 m. N.W.), hdqrs. of the **Tirhut** Division, whence there is a branch to **Hajipur** on the main line (**Cawnpore** to **Katihar**), which again meets the **Tirhut** line at **Bachhwara** (between **Semaria Ghat** and **Samastipur**), and leaving it at **Barauni** (6 m. from **Semaria Ghat**) proceeds to **Katihar** (111 m. E.). From **Muzaffarpur** the **Tirhut** line continues 50 m. to **Motihari** (D.B.), 63 m. to **Sagauli**, 77 m. to **Bettiah** (D.B.) and 100 m. to **Narkatiaganj**.

6 m. by road from **Pusa Road** station on the line between **Samastipur** and **Muzaffarpur** is **Pusa**, where there is an **Agricultural Research Institute**, fully equipped with laboratories, museums, library and reading-rooms. The Institute was built at the initiative of **Lord Curzon**; **Mr Phipps**, an American gentleman, made a substantial donation towards its cost. There are a **Club**, and a commodious and furnished guest-house, at **Pusa**. (Available with permission of the **Director**.) The District abounds in old temples and places of historical interest, being identified with the ancient **Hindu Kingdom of Mithila** mentioned in **Hindu** mythological works.

From **Sagauli** a branch of 18 m. runs to **Raxaul**, the starting-point for **Katmandu**, the capital of **Nepal**. A **Nepal Government Railway**, the first of its kind, has been constructed from **Raxaul** to **Amlekganj** (24 m.). 16 m. N. of **Bettiah**, (nearest **Ry. Station Chainpatia**), on a branch line from **Sagauli** to **Narkatiaganj**, which proceeds

thence to **Bhikna Thori**), at **Lauriya Nandangarh** is a **Buddhist** stone lat, crowned by a lion—almost the only isolated one in **India** which still bears a recognisable figure. It is a polished block of sandstone, 33 ft. high, with a capital nearly 7 ft. in length. The funeral mounds near the **Asoka** column at **Lauriya Nandangarh** are the only indisputably **Vedic** monuments yet identified in **India**.¹

There is another column at **Araraj**, 22 m. S.W. of **Motihari Stn.** (on the branch line from **Muzaffarpur** to **Bettiah**), where motors are available. Two other pillars (one of 45 ft.) are lying on the ground, at **Rampurwa**, 1 m. S. of **Gaunaha Ry. Stn.** on the **Narkatiaganj-Bhikna Thori** line, and at **Basarh** in the **Muzaffarpur** district. All four were set up on the road from **Pataliputra** (**Patna**) to **Nepal**.

From **Sonepore** station (p. 473), the main line goes W. to **Chapra** (202 m. from **Katihar**) at the confluence of the **Ganges** and the **Gogra**, once an important river-mart, with **Dutch** and **English** factories: headquarters of the **Saran** district. A branch *via* **Chapra Kacheri** runs N. through **Marhora** (an industrial centre with sugar factory, etc.) to **Mashrak**. Another branch runs to **Revelganj Ghat**, where it crosses the **Gogra** River, and goes up to **Jhusi** (near **Allahabad**) *via* **Ghazipur Aunrihar** and (128 m. from **Chapra**) **Benares Cantonment** (Route 5).

79 m. from **Chapra** on this branch line is **Ghazipur**, hdqrs. of a District in the **United Provinces**. A mausoleum commemorates the death here on 5th October 1805 of **Lord Cornwallis**, the **Governor-General**. **Ghazipur** and **Patna** (p. 64) were the two opium agencies. The **Patna** agency was closed in 1911 and the cultivation of opium,

¹ *Dir.-Genl. Archaeol. Ann. Rep.*, 1906-7, p. 119, *et seq.*

as it still obtains at Ghazipur, is carried on by a system of annual engagements and advances. From Aunrihar (106 m. from Chapra), also on this line a branch runs 37 m. N.W. to Jaunpur and another from Ballia *via* Phephna to **Azamgarh** (70 m.) and **Shahganj** (105 m.), on the O. and R. section of the E.I. Railway.

From Chapra the main line runs N.W. to (71 m.) **Bhatni** (junction for a branch, 101 m., to Benares Cant.), and thence to Gorakhpur (112 m. from Chapra).

Gorakhpur (which is named after a Hindu saint of that name), and is the hdqrs. of a District, has no features of historical or antiquarian interest except an image of Vishnu Bhagwan, now lodged in a temple at Jetepur, N. of the City. It is the centre for the recruitment of Gurkha soldiers for the Indian army, and also the hdqrs. of the B. and N.W. Ry., with workshops employing 4000 men. (D.B.; permission of Chairman, Dt. Bd. reqd. Inspn. Bung.; permission of Dt. Engr. reqd.). Gorakhpur to Fyzabad, by road, 79 m.; Fyzabad to Gonda, 29 m. From Gorakhpur a loop-line runs N. to (40 m.) **Uska Bazar**, and goes on to Balrampur and Gonda (p. 429). A second loop runs S., 103 m., to Savan on the main line (38 m. from Chapra). Another branch runs N.E. to Narkatiaganj, 89 m., in Champaran Dt., crossing the Gandak R. at Chhitauni.

The Tarai, N. of **Uska Bazar** (Basti Dt.), is of special interest as having been the undoubted seat of the birth of Buddha, and of many of the scenes connected with his life and death. What has been identified beyond all doubt of late years are (1) a stupa raised over part of the relics of Buddha at **Pipráwá**, 6 m. N. of Birdpur (nearest ry. stn. is Nowgarh, beyond Uska Bazar stn. on the Gorakhpur-Gonda

loop); and (2) the Lumbini Garden, now called the **Rummin Dei** (in Nepal), where Buddha was born, 9 m. E. of **Pipráwá**. At the former was found by Mr Peppé, owner of the estate, in January 1898, a relic-casket inscribed, "This relic shrine of the Divine Buddha is that of the Sákya," who received one-eighth of the relics and erected a stupa over them near Kapilavastu. At the latter was discovered a lat of King Asoka, split down the middle, with an inscription that "here Buddha Sakyamuni was born." This column had been once surmounted by a horse, and Hiuen Tsang in his travels (629-645 A.D.) recorded that he saw at the birthplace a pillar which had been split by lightning, and which bore a horse. The bell-shaped capital of it has also been discovered, and in an adjoining temple a relief of the birth scene of Buddha, in which his mother, Maya-devi, stands erect holding the branch of a sal-tree, and the child stands on the ground at her right, a usual motive. **Kapilavastu** lay 10 m. to 15 m. W. of this garden, and the site is possibly marked by extensive ruins at **Tauliya Kot** (in Nepal), 9 m. N.W. of **Pipráwá**.

Between Bhatni and Gorakhpur is, 81 m. from Chapra, **Tahsil Deoria** station. 21 m. N. of this station, 12 m. S. of **Padrauna** station on the Gorakhpur-Savan loop (43 m. from Gorakhpur) and 34 m. E. of Gorakhpur, is **Kasia** (connected with each of these places by metalled roads) the hdqrs. of a Pargana Officer, containing an Inspection Bungalow (permission to occupy can be obtained from the Chairman, District Board, Gorakhpur). 1½ m. to the W. of Kasia is the group of ruins which are believed to be the site of **Kusinagara** and the scene of the death of Buddha. The remains comprise six groups; the first con-

sists of an isolated brick stupa some 50 ft. in height and overgrown with trees on the W. edge of the Ramabhar Tal, bearing the name of Devasthan or Ramabhar Bhawani: the second is a small mound of ruins to the S.W. of this stupa and a short distance to the N.E. of the village of Anrudhwa. The third is the Matha Kunwar-ka-kot, about a mile W. of the Ramabhar stupa, comprising a temple with a colossal recumbent image of the dying Buddha, a large stupa, several monasteries and other buildings. The fourth is a colossal statue of the seated Buddha, called Matha Kunwar, about 400 yards S.W. from the kot, while the fifth consists of the remains of an enclosing wall and the last of a number of small earthen mounds and barrows, locally called Bhimawat, to the N. and E. of the kot. Some excavations made here in 1896, and further work done in 1904-7, showed that the stupa and temple of the dying Buddha were the nucleus of an extensive group of Buddhist buildings, comprising several large monasteries, a few small shrines and a great number of brick stupas of various sizes. These buildings belong to widely different periods, and those of later date have been raised on the ruins of earlier monuments. It also became evident that the history of this sacred site does not start from the erection of the Nirvana image, for the discovery of coins and other inscribed objects proves that several of the buildings date back to the Kushana and early Gupta epochs. In the fifth or sixth century a portion of the buildings was destroyed in a fire, possibly due to an invasion of the Huns. In the neighbourhood numerous clay seals inscribed "Convent of the Great Decease," have been found. The place is visited by a considerable number of Buddhist pilgrims mostly from Burma.

From Gorakhpur the main line of the Bengal and N.W. Railway proceeds to Gonda (207 m. from Chapra) and thence to, 262 m., Barabanki, 283 m., **Lucknow** (Aishbagh junction) and, 328 m., **Cawnpore**. The through journey (530 m.) from Katihar Junction (p. 472) to Cawnpore, and also the return journey, can be made by express train.

(c) **Calcutta by E. Bengal Railway to Plassey and Murshidabad**, 7-8 hrs.; and on to **Lalgola Ghat** (for **Malda**, **Gaur**, and **Pandua**), and **Katihar Junction**.

Sealdah station (p. 109).

24 m. **Naihati junction** for **Bandel junction** on the East Indian Rly. (Route 2) across the Jubilee Bridge.

46 m. **Ranaghat junction** for the main line to **Siliguri** and **Darjeeling** (Route 24). Branch line to **Santipur**, whence light railway to **Krishnagar City** and **Nabadwip Ghat**.

62 m. **Krishnagar**. Hdqrs. of the **Nadia Dt.**, and residence of the **Maharaja Bahadur of Nadia**.

Nabadwip (approached by the light railway from **Krishnagar** to **Nabadwip Ghat**, 7 m., or by the **Bandel-Barharwa loop-line** of the **E.I. Ry.** from **Howrah**) is a celebrated seat of **Sanskrit learning**, and is also a great place of pilgrimage, being known as the "Benares of Bengal." It was the birthplace of **Chaitanya (1486-1527 A.D.)**, the **Hindu religious reformer**.

Santipur (on the **Ranaghat-Santipur-Krishnagar Light Ry.**) is another ancient and important town, once famous for its fine muslins.

93 m. from **Calcutta**, **Plassey station**. There is a good bungalow

3 m. from the railway station, close to the monuments on the battlefield; but travellers must make their own arrangements for meals and servants. There are no conveyances available from the station to the bungalow.

The bungalow is in the charge of the Executive Engineer, Nadia Rivers Division, Berhampore, Bengal; travellers should ascertain from him whether the bungalow will be vacant if they wish to spend a night there.

Plassey (Palasi), so called from the Palás-tree (*Butea frondosa*), is famous for Clive's great victory in 1757. The position of the British forces is marked by a mound near the river-bank and the old monument, and has now been more fully indicated on the ground at the instance of Lord Curzon, who erected a second memorial.

The British force advanced from Chandernagore (p. 131) on 13th June, first to Katwa, and then across the Bhagirathi, between which and the Jalinghi channel of the Ganges Plassey was situated, and advanced against Suraj-udaula's army at that place on the night of 22nd June. The battle opened the next day, 23rd, at 8 A.M., the French in the service of the Nawab facing the left of the British line, which touched the river, and the huge Indian forces of the Nawab forming a semicircle on the right front and right of that line. About midday a heavy downpour of rain occurred, and the British guns, having been protected during it, overpowered the advance made by the enemy a little later. The Indian forces then fell back to the entrenched camp; the Nawab was counselled by traitors to flee, and Mir Jafir separated himself in accordance with his understanding with Clive, who thereupon advanced and drove the French from their position, and afterwards took the entrenched camp, the enemy then

offering but little resistance. The British force amounted to 3000, of whom one-third were Europeans—800 of these being English—and the Nawab's force to over 60,000. Captain Eyre Coote, who had been a strong supporter of the counsel to fight, which Clive ultimately adopted, distinguished himself greatly in the battle. Although the general outlines of the battlefield can be made out, the landmarks mentioned in contemporary accounts have mostly disappeared; such as the Mango Tope, in which the British were entrenched, the brick-kilns which formed their advanced posts, and the Nawab's hunting-lodge, where Clive retired to meditate upon the victory. Of the regiments engaged, which were permitted to emblazon "Plassey" on their colours, the 1st Battn. of the Dorset Regiment (the old 39th Foot) alone remains.¹

116 m. Berhampore Court, 7 m. below Murshidabad (D.B.) (pop. 26,670), the civil headquarters of the Murshidabad District. The Krishnanath College here is affiliated to the Calcutta University. After the Battle of Plassey, as the factory house at Kasimbazar, where Warren Hastings resided, had been destroyed by Suraj-udaula, Berhampore was chosen as a site for a Cantonment, the barracks of which cost £302,270. It was the scene of the first overt act of mutiny in 1857, which occurred on the 25th of February, when the 19th Bengal Infantry refused to receive their ammunition. Farther than this the mutiny did not go, but the regiment was marched down to Barrackpore and disbanded there. In the cemetery

¹ Clive took his title of Baron of Plassey in the Irish Peerage from the estate of Ballykilty in County Clare, which he purchased on his return from India, and which he re-named Plassey, after "the place where we gained our great victory in India, to which I owe all my good fortune" (Letter of 13th February 1761, to the Duke of Newcastle).

here are buried George Thomas, the Irish sailor, who became Raja of Hansi (p. 252), and the infant son of Mrs Sherwood, whose *Little Henry and his Bearer*, was at one time a nursery classic.

118 m. Kasimbazar. This was the British trading-station previous to 1757, after which it was moved to Berhampore. The English were settled here as far back as 1658, and Job Charnock, the founder of Calcutta (p. 105) was "Chief" in 1681. Of the factory, which was once a fort with solid bastions mounting four guns and a saluting battery of 24 guns on the river-side, nothing is visible except a mound containing a portion of the fortifications. In the old Residency cemetery, opposite the site of the factory, are buried the first wife of Warren Hastings and her daughter. She was the widow of Captain John Buchanan, a victim of the Black Hole, and died in 1759, while Hastings was a factor here. There is also an old *Dutch Cemetery*. At Kasimbazar is the residence of Maharaja Manindra Chandra Nandi, the descendant of Hastings' famous dewan, Kantu Babu.

122 m. Murshidabad, the chief city of the district of the same name. This was the residence of the Nawab Nazims of Bengal, and was called after the great Nawab Murshid Kuli Khan,¹ the original name being Maksudabad, whence the Muxadabad of old records. It was a prosperous place in the last century, and owed much of its

¹ The well-known Subadars and Nawab Nazims of Bengal were Murshid Kuli Khan (known also as Jafir Khan, a converted Brahman), died 1725; Shuja Khan, died 1728; Alivardi Khan, died 1756; Suraj-ud-daula; Mir Jafir and Mir Kasim. The famous Jain family of Murshidabad which bore the title of Jagat Seth, or World Trader, and played a prominent part in the affairs of Bengal in the 18th century, resided at Mahimapur, 2 m. N. of Murshidabad. (See *History of Murshidabad*, by Major J. H. T. Walsh.)

wealth to its being upon the line of trade from the interior of India to the European settlements on the Hooghly.

The population (1921) of Murshidabad city is 10,669. Murshidabad was formerly famous for carved ivory, embroideries, etc. But now these trades are confined to a few families of carvers at Jiaganj and Khagra. An introduction to the Nawab Bahadur of Murshidabad, through the Magistrate and Collector, who resides at Berhampore, will greatly facilitate the sight-seeing of the place.

The *Bera (Raft) Festival* is still celebrated here, in honour of Khwaja Khizr (the prophet Elias) on the night of the last Thursday of the Bengali month of Bhadra.

The *Palace of the Nawab*, which, with the surrounding buildings, enclosed by a wall, goes by the name of the *Nizamat Kila*, is situated on the river-bank about the centre of the town, and is in the Italian style, somewhat resembling Government House at Calcutta. It was built in 1837 at a cost of £167,000, the architect being General Macleod of the Bengal Engineers. It contains an imposing circular Darbar-room, a Banqueting-room 290 ft. long, with a picture of the Burial of Sir John Moore, by Marshall, at the W. end, and many other handsome apartments. The Armoury is well worthy of a visit. In the Library are some very rare MSS.

In the same enclosure with the palace is the *Imambara*, built in 1847.

Just outside the city is the *Katra*, containing the tomb of Murshid Kuli Khan. It was constructed on the model of the Great Mosque at Mecca, with two minarets 70 ft. high, but is now in ruins.

Near this, and 60 yds. from the road, is the *Great Gun*, the sister gun to that at Dacca. It is 17½ ft.

long, with a girth of 5 ft. at the breech and a calibre of 6 in. The gun was left on its gun-carriage where a *pipal* tree grew, from a seedling, beneath it and gradually enveloped three-fourths of the gun. The tree now supports the gun entirely. The inscription is in Persian, with the date 1637. S.W. of it, and 2 m. S. of the city, is the *Moti Jhil*, or "Pearl Lake," a beautiful spot. The palace, which was on the bank of the lake, was seized by Suraj-ud-daula in 1756, and it was from its doors that he set out in the following year on his disastrous march to Plassey. It was here, too, that Clive held the first English *puniya*, or collection of revenue, in 1765, sitting side by side with the Nawab Nazim, Nazim-ud-daula. It was the home of Warren Hastings in 1771 and later on of Sir John Shore, who admired its "cooing doves, whistling blackbirds and purling streams." The pleasure garden is still known as the Company Bagh; but the only buildings which survive are the mosque of Shahamat Jang, the nephew and son-in-law of Alivardi Khan, and the ruins of the Baradari built by Mir Jafir after Plassey. In the *Mubarak Manzil*, the old Court House of the E.I. Company, a little to the E. of the *Moti Jhil*, there was kept the black stone throne of the Nawab Nazim upon which Clive installed Mir Jafir after the battle of Plassey, and upon which he himself sat in 1765, when he proclaimed that the Company had taken over the *deiwani* (civil administration of Bengal, Bihar and Orissa), under the farman of the Emperor of Delhi, Shah Alam, granted on 12th August 1765. The throne has been removed to the Victoria Memorial Hall at Calcutta (p. 119) and its place taken by a plain stone slab. The lake contains a good many crocodiles.

The *Khushbagh*, or "Garden of Happiness," the old cemetery of

the Nawabs, is opposite to the *Moti Jhil* on the right bank of the river. It consists of three walled enclosures. The entrance to the outer one, planted with flowers and shady trees, is from the E., close to where some ruined ghats stretch down to the deserted bed of the *Bhagirathi*, which now flows in another channel. In the central enclosure are the tombs of the good Nawab Ali Vardi Khan and his nephew and son-in-law Suraj-ud-daula. They are almost level with the ground, and are covered with embroideries. The third enclosure contains a tank and Musafir Khana (Travellers' House). The *Hira* (diamond) *Jhil*, where the *Mansurganj Palace* stood, is near the *Roshanbagh*, also on the right bank of the river, opposite to the present palace.

The *Nizam College*, or Nawab's Madrasa, which was formerly kept exclusively for the relatives of the Nawab (who live free of charge in a special boarding-house), has now been amalgamated with the Nawab's High School under the name of the "Nawab Bahadur's Institution." This institution is open to the public.

The *Cemetery of J'afra Ganj*, about 1 m. to the N. of the Palace, contains the graves of the Nawabs Nazim appointed by the English. Opposite the gate is a handsome mosque.

The *Jafraganj Deorhi* was the residence of Mir Jafir before his accession. In the women's quarters was held the last secret conference with Watts, the chief of the English factory, before the battle of Plassey. Suraj-ud-daula was killed here by Mir Jafir's son Miran, but the tree which marked the spot has disappeared.

The Murshidabad District is noted for its *silk* industry. The villagers rear the silkworm at home, and sell the cocoons to the spinners, who export the skeins.

Silk cloth and handkerchiefs are woven here on hand-loom.

From Murshidabad the railway runs on to

145 m. **Lalgola Ghat**, on the Ganges, whence there is occasional steamer service to Rajmahal (p. 471). Steamer connection with a line which runs from Godagari Ghat, on the opposite side of the river, to (49 m.) **Malda**.

English Bazar * (pop. 14,057) is situated on the right bank of the Mahananda about 4 m. below Old Malda, from which the District takes its name. The place is not often visited by travellers, and arrangements should be made by writing to the Collector at Malda. The distance from English Bazar to the N. edge of Gaur is about 4 m.; and to the Adina Mosque at Pandua about 13 m. The visit to each of these places will occupy a whole day.

Old Malda lies at the confluence of the Kalindri with the Mahananda. It is an admirable position for river traffic, and probably rose to prosperity as the port of the Muhammadan capital of Pandua. During the 18th century it was the seat of thriving cotton and silk manufactures, and the French and Dutch had factories here. The English factory was originally established in 1656 at Old Malda and was transferred in 1771 to English Bazar (Angrezabad). It was fortified with bastions, and the modern court-house and all the public buildings are within its walls. A column "erected by Thomas Henchman, 1771," stands in the compound of the court-house.

The ruins of Gaur and Pandua, successive capitals of Bengal, are very picturesque and of considerable interest to the antiquarian. The sites of these old cities are being rapidly brought under the plough, and the dense jungles which thirty years ago sheltered tigers and leopards no longer exist.

Gaur was the metropolis of

Bengal under its Hindu Kings. Its most ancient name was Lakhnauti, a corruption of Lakshmanawati. But the name of Gaur also is of great antiquity, and is found in the *Gauriya Brahmana*. Its known history begins with its conquest, about 1200 A.D.¹ by the Muhammadans, who made it the chief centre of their power in Bengal for more than three centuries. A son of the Emperor Altamsh was Governor here, and the eldest son of Balban, Nasir-ud-din Bugra, became King of Bengal and refused the throne of Delhi. He was succeeded by two sons and a grandson, and then, about 1350, one Ilyas founded a kingdom which, with an interregnum, lasted till nearly 1500 A.D. When the Afghan Kings of Bengal became independent they made Pandua their capital (c. 1354 A.D.), and robbed Gaur of all the building material that could be removed. This accounts for the number of sculptured Hindu stones amongst the ruins of Pandua. When Pandua was in its turn deserted, Gaur again became the capital, and was called Jannatabad ("Terrestrial Paradise"), a name which occurs in the *Ain-i-Akbari*. It was sacked by Sher Shah in 1537, and the last of the Afghan Kings, Daud Khan, was absorbed into Akbar's empire in 1573 A.D. The city was entirely ruined by an outbreak of the plague in 1575. Contemporary narratives describe the place, in its prime, as extremely populous, containing the residence of the court and numerous seats of learning, and enjoying an immense trade.

The dimensions of the city proper, within the great continuous embankment, are 7½ m. from N. to S., and 1 m. to 2 m. broad. The W. side was washed by the Ganges, which flowed where the channel of the Little Bhagirathi now is. The E. side was protected by the

¹ Blochmann says 1198 A.D.; Thomas, 1202; Major Rævery, 1194.

Mahananda and by swamps. On the S. the Mahananda joined the Ganges, and left little space for an enemy to encamp. On the N. a fortification 6 m. long extends in an irregular curve from the old channel of the Bhagirathi at Sonatala to near the Mahananda at Bholahat. This rampart is 100 ft. wide at base.

In front of this rampart lay the most celebrated piece of artificial water in Bengal, the Sagar Dighi, 1600 yds. long by 800 yds. broad, dating from 1126 A.D. On the bank is the tomb of Makhdum Shaikh Akhi Siraj-ud-din and a small mosque, and S. of these is a ghat called S'adullapur, leading down to the sacred river. S. of this rampart was the N. suburb, between which and the city was another strong rampart and ditch. Towards the Mahananda the city rampart was double, and in most parts there have been two immense ditches, and in places three.

1 m. inside the city to the S., on the Bhagirathi, was the *Citadel*, 1 m. long from N. to S., and from 600 yds. to 800 yds. broad. The brick wall was very strong, with many flanking angles, and round bastions at the corners. On the N. side is the fine Dakhil Gate. It is built of small red bricks, and has been adorned with embossed bricks, which can still be seen on the towers at the four corners. The arch of the gateway is about 30 ft. high, and forms a corridor 112 ft. long. In the S.E. corner of the citadel was the palace, surrounded by a brick wall 66 ft. high and 8 ft. thick, with an ornamented cornice—hence called the *Bâis Gaji*, "Twenty-two Yards Wall." At the S.E. corner of the citadel are two mosques; the smaller one, called the *Kadam Rasul*,¹ built by Nasrat Shah

in 937 A.H. (1530 A.D.), is now kept in repair by the Indian Government. In connection with this mosque is preserved a stone, bearing what is reputed to be a footprint of the Prophet Muhammad. This is now in the custody of one Fayyaz Husain of Mahdipur, who produces it for the inspection of visitors. Fergusson says of its style: "It is neither like that of Delhi, nor that of Jaunpur, nor any other style, but one purely local, and not without considerable merit in itself; its principal characteristic being heavy, short pillars of stone supporting pointed arches, and vaults in brick. The solidity of the supports goes far to redeem the inherent weakness of brick architecture. It also presents, though in a very subdued form, the curved linear form of the roof, which is so characteristic of the style." Near it are the domed tomb of Fateh Khan and S.E. gateway of the citadel. Half a mile N. of this, outside the E. wall of the citadel, is a lofty brick tower, known as *Pir Asa Minar*, which had a chamber with four windows at the top, to which access was gained by a winding stair. The correct name of this tower is Firoz Shah Minar, *Pir Asa* being a local corruption. It was probably erected by Husain Shah in commemoration of his victories in Assam. Sir W. W. Hunter says: "One of the most interesting of the antiquities of the place is a *minar*. For two-thirds of the height it is a polygon of twelve sides; above that circular until it attains the height of 84 ft. The door is at some distance from the present level of the ground: and altogether it looks more like an Irish round tower than a *minar*." There is, or was, an inscription on this monument which ascribed its erection to Firoz Shah (1490 A.D.)

Half a mile N.W. again of this, and above the N.E. corner of the citadel, is the finest ruin in Gaur

¹ The only detailed account of the ruins at Gaur and Pandua is contained in Ravenshaw's *Gaur*. A brief description will be found in Fergusson's *Indian Architecture*, 2, 253.

—that of the *Golden Mosque*, or *Baradwari*. It measures 168 ft. from N. to S., 76 ft. from E. to W., and is 20 ft. high. The entrance is by an arched gateway of stone 26 ft. in height and 6 ft. in breadth. The mosque in plan is oblong, and originally consisted of four separate colonnades, arched and roofed over, and covered by handsome domes, in all 44 in number. Six minarets or columns of brown stone faced with black marble adorn the building; bands of hornblende about 12 in. in breadth embrace the column from the base to the capital, and are adorned with a profusion of flower work carved in marble. There was a raised platform at the N.W. corner of the mosque, probably for the use of ladies of the Court. Traces of this still remain. The domes are built of brick. The whole appearance of this building is strikingly grand, exhibiting the taste and munificence of the Prince who erected it—viz., Nasrat Shah, 1526 A.D.

Half a mile E. of the Kadam Rasul, on the side of the main road, is the *Tantipara Mosque*, remarkable for the specimens of embossed brickwork with which the front is adorned. It was probably built in 1475 A.D.

Half a mile S. again is the *Lattan Mosque*, also called the Painted Mosque, from the bricks being enamelled in green, yellow, blue, and white, and arranged in bands. When complete the effect of these must have been very striking.

Half a mile above it is the Piasbari Tank, with a small R.H. A tradition states that the water of this tank was formerly very impure and injurious to health, and that condemned prisoners were allowed only this water to drink. Piasbari means the "House of Thirst."

In the S. wall of the city is a fine central gate, called the *Kotwali Darwaza*, and S. from it

stretches an immense suburb called Firozpur. In it, 2 m. from the S. wall, is the *Lesser Golden Mosque*, the "gem of Gaur." It dates from the end of the 15th century. The carved stone panels in the front wall display very fine workmanship.

Pandua is 7 m. N.E. from Old Malda and begins at 11 m. from English Bazar. It was called by the Muhammadans *Firozabad*. The first independent King of Bengal made it his capital. A road paved with brick, from 12 ft. to 15 ft. wide, passes through Pandua, and almost all the monuments are on the borders of it. Near the middle is a bridge the abutments of which have evidently been brought from the Hindu temples at Gaur, as figures of men and animals are sculptured on them. On approaching the ruins from the S., the first objects that attract attention are the 17th-century shrines of *Makhdum Shah Jalal* and *Kutb 'Alam Shah*, called the Chhe Hazári and Báis Hazári, or 6000 and 22,000, from the area allotted for their endowment. To the N. stands the small *Golden Mosque*, with granite walls and ten brick domes. An Arabic inscription says that it was built by Makhdum Shaikh, son of Muhammad Al-Khalidi, in 1585 A.D. N. of this is a high building, called *Eklakhi*, as having cost a lakh. It is perhaps one of the finest examples of the Bengali tomb. It is 80 ft. square, covered by one dome, and contains the remains of Ghias-uddin, his wife, and his daughter-in-law. 2 m. beyond it is the tomb of Sikandar, father of Ghias-uddin, and the greatest of the monarchs who made Pandua their capital. It forms part of the great mosque, called the *Adina Masjid*, the finest specimen of Mughal architecture in Lower Bengal. It was built about 1360 by Sikandar Shah, and shows

traces of having been constructed out of Hindu and even Buddhistic remains. The "Buddhist railing" round the W. front is incapable of any other explanation. The Kibla (centra hall) and Mimbar (pulpit) are gems of stone carving. According to Fergusson, the ground plan and dimensions are exactly similar to those of the Great Mosque at Damascus. It extends 500 ft. from N. to S., and 300 ft. from E. to W. This space is subdivided by transverse brick walls and stone pillars into 127 squares, each covered by a dome. On the outside are many small windows, highly decorated with carved tiles disposed in arches. The mosque proper is composed of a central apartment and two wings. The first is 62 ft. high in the centre from the floor to the middle of the dome. To the N. of it is a ruined gallery, as in the mosques at Ahmadabad, known as the Takht Badshahi.

The only other ruin of note in Pandua is the Satáigarh, said to have been the King's Palace. It is situated opposite the Adina Mosque, in the midst of dense jungle. The remains of numerous cells, believed to be baths, may still be noticed.

From Malda (p. 480) the line continues to (105 m.) **Katihar Junction**; (123 m.) Purnea; (164 m.) Forbesganj; and (173 m.) Jogbani on the Nepal frontier. **Purnea** is an important jute-growing district and produces more than two-thirds of the total crop in Bihar and Orissa. From Katihar the E.B. Rly. has a line E. to Dinajpur (69 m.) and **Parbatipur** (88 m.), where it connects with the main line to Darjeeling (Route 24).

ROUTE 24.

CALCUTTA (**Sealdah**) by the Eastern Bengal Railway to

- (1) **Kurseong** and **DARJEELING**; Routes into **Sikhim** and **Tibet**.
- (2) Goalundo for **Narayanganj**, **Dacca** and **Eastern Bengal**.
- (3) Goalundo and Chandpur; thence by Assam Bengal Railway to **Chittagong**, **Sylhet** and **Cachar** (Surma Valley).
- (4) **Gauhati**, **SHILLONG**, and **Assam Valley** (Circular Tour by river or rail).

The Darjeeling mail, the Dacca mail (*viâ* Narayanganj), the Chittagong mail (*viâ* Chandpur), and the Assam mail all start from **Sealdah** (p. 109), the Calcutta terminal station of the Eastern Bengal Railway. A combined visit to Eastern Bengal, the Sylhet and Cachar Valleys and Assam is best made by the E. Bengal Railway to Goalundo, and thence by steamer to Narayanganj or Chandpur. A visit to Assam only, or a combined visit to Darjeeling and Assam, can be comfortably accomplished by the E.B. Railway route *viâ* Santahar Jn. and Gauhati.

- (1) From Calcutta by Eastern Bengal Railway to Darjeeling by Ishurdi, Siliguri, and Kurseong.

Mail train in 17 hrs. Fare—1st class, Rs.55-2-6, single, Rs.82-12-0, return; Rs.74-3-0, return week-end. Extra fare Rs.5 for Siliguri-Darjeeling rail-motor service.

24 m. **Naihati** junction for the Hooghly Bridge (p. 67).

46 m. **Ranaghat** junction (D.B.). Branch E. for Jessore and Khulna and W. to Murshidabad (77 m.). See Route 23, p. 476.

103 m. **Poradaha** junction station. Branch line E. to (52 m.) Goalundo Ghat, on the Ganges (p. 492) for Dacca and Chittagong.

125 m. **Ishurdi** junction, after crossing the Ganges by the Hardinge Bridge, one of the longest bridges in the world, named after the Viceroy, Lord Hardinge of Penshurst, who opened it. The view from it is very fine. It cost £2,500,000. Branch, 54 m., N.E. to Sirajganj Ghat (p. 494). Sirajganj is an important centre of the jute trade.

173 m. **Santahar** junction. The Assam line branches off here (p. 497).

233 m. **Parbatipur** junction. (R.), from whence a line runs E. to Rangpur and Kaunia, on the Assam mail route (p. 497), and W. to (88 m.) Katihar, junction with the B. and N.W. Ry. (p. 483, Route 23).

295 m. **Jalpaiguri** (R.), Headquarters of the Bengal District of the same name and of the Commissioner of the Rajshahi Division.

Population of the District, 936,269 in 1921, of whom 288 were Europeans. Climate fairly healthy during the cold weather but malarious during the rains. Annual rainfall 200 in. in some parts of the District and 125 in. in Jalpaiguri town itself. Two D.Bs. furnished, one at the Headquarters station of the Alipur Duar Sub-division and the other in Jalpaiguri itself. Road communications greatly improved in recent years.

The Bengal Duars Railway runs through the tea-garden area, commencing from Lalmanir Hat in the Rangpur District and terminating at Madarihat. Branches run from Lataguri station to Ramshai, from Mal station to Bagrakote, and from Chalsa station to Matelli

in the N.W. corner of the District. For Lalmanir Hat, see p. 497.

There are some 140 tea-gardens within the District, employing a permanent labour force of nearly 100,000 persons and producing 72½ millions lb. of tea. The District includes several reserved forests in which rhino, elephants, and tigers are to be found. Elephants are especially plentiful, and considerable numbers are captured from time to time.

Exclusive of tea the ordinary crops of the District are rice, jute and tobacco.

318 m. **Siliguri** station (R., D.B.). Light ry. on the Teesta Valley extension (p. 488) to Kalimpong Road Stn., 30 m., whence 11 m. by road *via* Teesta Bridge to **Kalimpong** (3933 ft.), where are the St Andrew's Homes for 600 destitute children of European descent. Cars, by arrangement with the proprietor of the Himalayan Hotel at Kalimpong, from Kalimpong Road stn. (Rs.15) Thence by pony to Yatung and Gyantse (p. 492). Cart-road, suitable for motors, from the Teesta Bridge to (14 m.) Rungpo (D.B.), and thence up the course of the Rongnye River to (38 m.) **Gangtok**, the hdqrs. of the Political Agent in Sikhim. There are D.Bs. between Rungpo and Gangtok at (5 m.) Sanko-Kola and (7 m.) Shamdong. For tours in Sikhim see p. 489.

From Siliguri to Darjeeling the journey is made by the *Darjeeling Himalayan Railway* on a gauge of 2 ft. The distance is 51 m., and the time occupied 5¾ hrs. (fare, 1st class, Rs.19-0-6). The running speed of the trains, both up and down, is about 12 m. to 13 m. per hour, and the average gradient nearly 1 in 29. A rail motor runs daily except Wednesdays in 4¾ hrs. Motor-cars for the journey by road are available.

Travellers are strongly advised to

have extra warm clothing at hand, as the change of temperature from the plains to the mountains is sometimes very great. Spectacles or veils should be used against the dust and blacks from the engine, especially on the front seats of the open carriages, from which the best views are obtained. Only hand luggage can be taken into the carriages.

Siliguri was the base of the expedition of 1904 into Tibet, Lhasa being 359 m. distant by the most direct route.

At **Sookna** station, 7 m. from Siliguri, the cars begin to ascend. The turns are very sharp, and at each a fresh landscape of surpassing beauty is opened out. The sides of the mountain are clothed with lofty trees and masses of jungle, with graceful tree-ferns in the ravines at the higher altitudes. At about 15 m. the cars pass round a spur which projects from the mountain, and the line runs on the edge of a precipice of 1000 ft. Farther up the line threads an extraordinary loop.

At (19½ m.) **Tindharia** (R.) the railway workshops are situated, 2822 ft. above sea-level. At 25½ m. the line passes over the **Pagla Jhora**, a large water-course. The hillside at this point is continually sinking, and strong revetments have been built.

32 m. from Siliguri and 350 m. from Calcutta, **Kurseong** station* (R., D.B.); there are tea-gardens here, with European managers and medical men residing on them. Kurseong is 5000 ft. above sea-level. Those who stray off the main paths in damp weather must take precautions against the leeches, which are numerous. At Kurseong the train halts half an hour while a late breakfast or lunch is served at the Ry. Refreshment-room. The old Punkabari road crosses the railway here,

zigzags up the hill for nearly 2000 ft., and runs to Jor Bungalow, nearly parallel to the railway. This is one of the prettiest rides in the District. A little above Kurseong is the Jesuit Training College; and near Kurseong are the Dowhill and St Helen's Schools for girls, and the Victoria School for boys: 2 m. from Kurseong is the Goethals School, established by the Irish Brothers.

At 40 m. is Sonada Brewery.

At 46 m. is Jor Bungalow, a collection of shops and huts on the narrow ridge or saddle which joins the Darjeeling spur to the Senchal Hill. At Jor Bungalow the road to Kalimpong branches off; there are also roads to the Darjeeling Golf-course, near Tiger Hill, to the Darjeeling Waterworks, and to the Katapahar and Jalapahar Cantonments. A short distance from Jor Bungalow is Ghoom station (47 m.), whence the main road to the Nepal frontier starts. Near Ghoom station the Auckland road to Darjeeling joins the railway road. Ghoom station is the highest point on the railway, 7407 ft. About ¼ m. from it, just above the road to the Nepal frontier, is the Buddhist monastery of the Yellow Sect, constructed by Lama Sherab Gyantso, near which is the interesting Buddhist burning-ghat. From Ghoom, the train runs downhill to Darjeeling, which is reached within half an hour.

51 m. from Siliguri and 369 m. from Calcutta, **DARJEELING*** (place or town of the thunderbolt). Rickshaws, dandies, and ponies can be hired just outside the Darjeeling Railway Station, and the Railway Company send up passengers' luggage to any part of the town. The rates are—Rs. 1, 8 as. for a rickshaw, Rs. 1, 8 as. for a dandy, 12 as. for a pony.

The beauty of its situation, upon a ridge high (about 7000 ft.) above the bed of the Great Rangit River, the mountain-side scattered over

with villas and bungalows, and the colossal background of Himalayan giants towering above it, together with its moderate temperature, which neither exceeds 80° in summer nor falls below 30° in winter, tend to make Darjeeling a most agreeable residence, and have rendered it the most important sanatorium of Bengal.¹ The temperature averages 2° above that of London all the year round.

From Darjeeling the highest **Mountain Peaks** in the world can be seen. Of these the loftiest is *Mount Everest*, 29,002 ft., visible from *Tiger Hill* (a 6-m. ride from Darjeeling) or from *Jalapahar*, the military Cantonment, though the distance is at least 120 m. The other peaks seen from Darjeeling or Jalapahar are—the magnificent array of the Kinchinjanga peaks (28,146 ft. high and 45 m. distant); to the W. of these, *Kabru* (24,002 ft.) and *Jano* (25,294 ft.); to the E. of them, *Pandim* (22,010 ft.), with *Narsingh* (19,130 ft.) in front of it, and only 35 m. distant; and farther E. again the fine snowy peak of *Siniolchu* (22,620 ft.). Much of the surface of the highest peaks is too sheer for snow to lie upon it.

The view of unrivalled **Mountain Scenery** is unspeakably grand, and there are many views, and particularly that of Kinchinjanga, which impress the mind more and more every time that they are seen. Too often, unfortunately, clouds veil the highest peaks for days together, and there is no certainty of an unclouded view of Kinchinjanga in the cold weather,

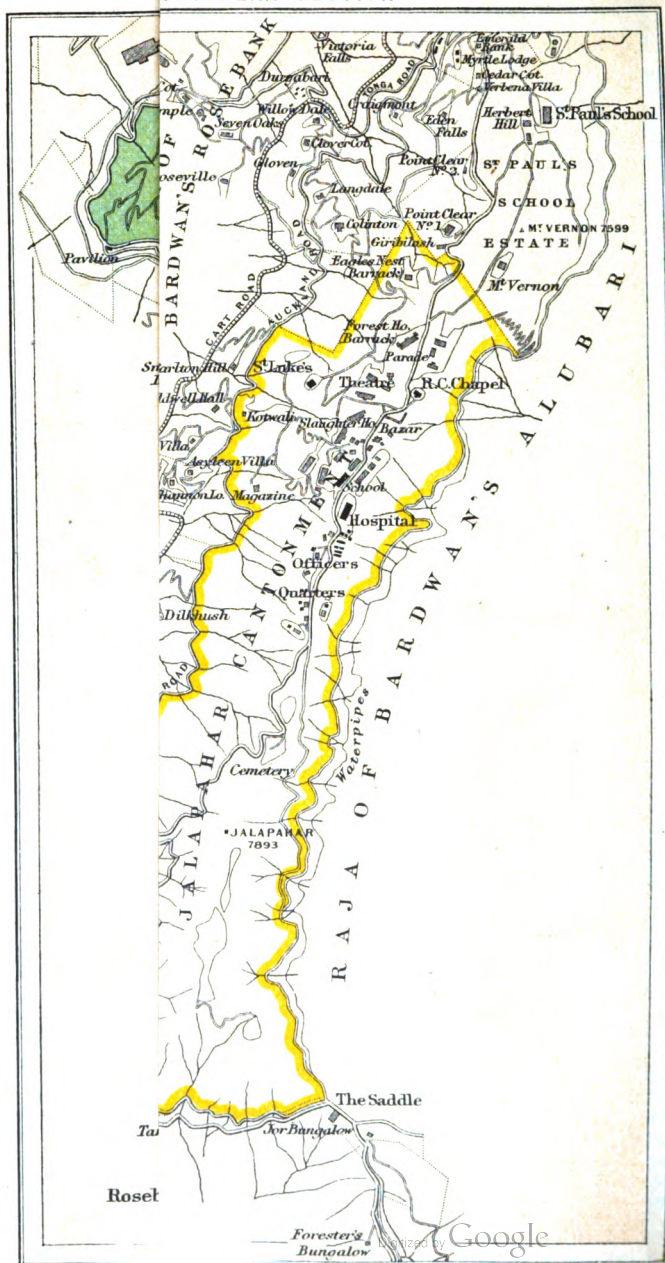
though such views are often obtained, especially after rain. When the clouds roll away, and display the bare granite summits, the eye looks over the lofty hills and across a vast chasm to the line of perpetual snow, about 17,000 ft. high, on the side of the stupendous Kinchinjanga. Above that rises a glittering white wall, and then it seems as if the sky were rent and the view is closed by enormous masses of bare rock. There is one special feature in the summit of Kinchinjanga, and that is a lofty wall of granite of prodigious breadth, which appears to divide the summit into two portions. The effect is much more striking than if it were one great mass of snow. The extraordinary grandeur of this scene is heightened by the colouring given to it by the rising and setting sun or by the moon.

The **District of Darjeeling** (pop. 282,748) is divided into two portions—the N. is from 4000 ft. to 9000 ft. above the sea-level; the S., or *Morang*, consists of the spurs of the first range of the Himalayas and the plains thence to the District of Rangpur. Mountains which rise to between 12,000 ft. and 13,000 ft. divide it from Nepal. When Dr Campbell took charge, in 1839, there were only twenty families in the whole district; he remained Superintendent for twenty-two years, built the bazar, the cutcherry, and church, made roads, and established a convalescent depot at *Jalapahar*, the *Military Cantonment S. of Darjeeling*.

Darjeeling suffered severely from the earthquake of 1897 and the great storm and landslip of September 1899. On the *Mall* is the bandstand and a drinking fountain erected to the memory of Sir Ashley Eden, Lieutenant-Governor 1877-82. The *Eden Sanatorium* or *Convalescent Hospital* is a most conspicuous building.

¹ For Darjeeling and the neighbourhood, see *Tours in Sikkim and the Darjeeling District*, by Percy Brown (2nd ed., Calcutta, 1925); *Himalayan Journals*, by Sir Joseph Hooker (1854, reprint 1905); *The Lands of the Thunderbolt: Sikkim, Chumbi and Bhutan*, by the Earl of Ronaldshay (Constable, 1923); *Round Kangchenjunga*, by Douglas Freshfield (Arnold, 1903); *Newman's Guide to Darjeeling* (7th Edition, Calcutta).

SOUTHERN SECTION



The foundation-stone of *St Andrew's Church* was laid by Bishop Milman in 1870. The old Church dated from 1843. There are tablets in it to George W. Aylmer Lloyd, C.B., Lieutenant-General H.M.'s Bengal Army, who died at Darjeeling 1865, aged 76. To his influence with the Raja of Sikkim Bengal is indebted for this Sanatorium. Another tablet runs—

In Memoriam
CHARLOTTE, COUNTESS CANNING,
November 1862.

There are also a *Union Chapel* in Auckland Road, the Scotch Kirk (St Columba's), and other places of Christian worship. About $\frac{1}{2}$ m. beyond the Church is Government House, the large and comfortable residence of the Governor of Bengal, who spends May and June, September and October here. St Paul's and St Joseph's Schools are large establishments; there are also the Diocesan Girls' High School, the Loretto Convent School for girls, and Queen's Hill School for girls, besides several private schools. Near the Secretariat, and below the Victoria Pleasance Park, is a Museum containing fine collections of butterflies, moths, wasps, and ants.

The principal **Bazar** is in the centre of the town; on Saturdays and Sundays it is so thronged by picturesque folk from all parts—Lepchas, Limbus, Bhutias, Tibetans, Nepalese, Paharias, Bengalis, Kashmiris, and Marwaris—that it is difficult to make way through them.

The top of the ridge above the church known as **Observatory Hill**, is called by the Buddhists Dor-jeling-gang, or the hill of the thunderbolt town. It was once crowned by a Buddhist monastery, on the summit of the hill, constructed by Lama Dor-je Legdenla. At this holy site Buddhists and others offer prayers, ring bells, beat tom-toms, and make pro-

pitatory offerings. In the centre of the shrine are carved stones of Hindu - Buddhist deities, surrounded by bamboo poles, from which flutter paper of different colours, and cloth prayer flags printed with the horses of wind and prayers for luck. Some way below the ridge on the E. side is an interesting Buddhist *Chorten*, or chaitya, and a Buddhist monastery of the Red Sect of a distinctly Tibetan type in the picturesque village of the Bhutia Basti. It is worthy of a visit, not only on account of the temple, but also to see the hill people who inhabit the small village. The Birch Hill Public Park for picnics and views is a little over a mile from the railway station. The Victoria Falls are worth seeing, near Rosebank, the residence of the Maharajadhiraj Bahadur of Burdwan.

The Botanical Gardens are immediately below the Eden Sanatorium, on its W. side. Besides trees, there are collections of ferns and orchids.

The chief industry of the Darjeeling District is the cultivation and manufacture of *Tea* (see also p. 501). The date of its commencement is 1856, when the first tea-garden was opened. There are 167 gardens in the District, employing a permanent labour force of about 56,000 persons and producing 21 million lb. of tea.

There is not much game to be had in the immediate neighbourhood of Darjeeling, but for the pedestrian, the botanist, and the lover of the picturesque, there are endless excursions.

Darjeeling is lit by electric light, and an interesting trip may be made to the electric power station, 3000 ft. below the town, on the W. side of the spur. The distance is about 5 m., and a tea-garden is passed through on the way.

At 1000 ft. below Darjeeling is a fine wooded spur called **Lebong**, where English fruit-trees flourish,

and the tea-plant also succeeds admirably: at Lebung is the Cantonment for European soldiers, with a large parade ground, used for gymkhanas. Below is the village of Ging, surrounded by slopes cultivated principally with tea, also with rice, maize, and millet. Above the Ging village there is a Buddhist monastery of the Zok-chen-pa Red Sect, a branch of the great Pamiongchi monastery of Sikhim.

Excursions from Darjeeling.

(1) With the aid of a pony, an interesting expedition of four days may be made by **Tonglu** to **Phalut**, 49 m. in the direction of the snows. Coolies, laden, should do 12 m. a-day in the hills; the load is from 40 lb. to 60 lb.; the charge is about 14 ans. a day for each coolie. The distances are to—

Jorpokri (7400 ft.), 13 m.
Tonglu (10,073 ft.), 10 m.
Sandakphu (11,929 ft.), 14 m.
Phalut (11,816 ft.), 12½ m.

The views are magnificent. There is a good D.B. at each of these places. Provisions and bedding must be taken. Passes (Rs.2 per person) for the bungalows at these places must be obtained from the Deputy-Commissioner's office. A copy of his official Notice regarding the bungalows and other details should be obtained.

(2) Another very favourite excursion is to the **Suspension Bridge over the Great Rangit River**, 6000 ft. below which leads into Sikhim. A fair road has been made, by which the whole descent can be easily performed on ponies, the distance by the road being 11 m. The zones of vegetation are clearly marked, first by the oak, chestnut, and magnolia, which grow from 10,000 ft. to 7000 ft.; secondly, below 6500 ft., by the *Alsophila gigantea*, or tree-fern (to be seen from the Himalayas to the Malayan

Peninsula, in Java and Ceylon); thirdly, by the *Calamus* and *Plectocomia* palms (6500 ft. is the upper limit of palms in Sikhim); fourthly, by the wild plantain, which in a lower elevation is replaced by a larger kind.

At 6 m. from Darjeeling are the Badamtam Tea-garden and a R.H.; at 2 m. below again, an excellent view may be had of the Suspension Bridge.

At 10 m. from Darjeeling is the *junction of the Rangit with the Rongnye*. The Rangit's foaming stream runs through a dense forest. From the opposite direction the Rongnye comes tearing down from the top of Senchal, 7000 ft. above. Its roar is heard and its course is visible, but its channel is so deep that the stream itself is nowhere seen.

Farther down is the *junction of the Rangit with the Teesta*, which is sea-green and muddy, while the Great Rangit is dark green and very clear. The Teesta is much the broader, deeper, and more rapid. This expedition will take two days.

If time permits and the weather is favourable, it is worth while to follow the Teesta Valley down to Kalimpong Road stn. and proceed thence to Siliguri by rail (see p. 484).

(3) **Senchal**, 8595 ft., is clearly seen from Jalapahar, and is about 6 m. off. It used to be a depot for European troops, but was abandoned on account of its climate and the effect on the troops. The water for Darjeeling is taken in pipes from the Senchal springs. An expedition may be made to it, starting early in the morning. From Tiger Hill above Senchal, **Mount Everest** may be seen. Senchal is comparatively easy of access, and from Jalapahar the path along the ridge of the mountains may be seen. This path abounds in rare and beautiful plants, and traverses

magnificent forests of oak, magnolia, and rhododendron.

Nearly thirty ferns may be gathered on this excursion in the autumn. Grasses are very rare in these woods, except the dwarf bamboo.

(4) **Kalimpong** (32 m.) can be reached by a pleasant ride through the forest from Darjeeling, by way of (14 m.) Lopchu, ($4\frac{1}{2}$ m.) Pashok, and (3 m.) Teesta Bridge, from which point the remainder of the journey to ($9\frac{1}{2}$ m.) Kalimpong can be made by car (p. 484).

Sikhim (Sikkim).

The country of **Sikhim** with its lower ranges of mountains rising irregularly to the greater heights, figures prominently in the outlook from Darjeeling to the N. towards the snowy peaks of the Himalayas. A trip into Sikhim is well worth making. It should be noted that Europeans visiting Sikhim are required to carry a pass, and unless provided with a pass will not be allowed beyond the Darjeeling frontier. Passes are issued by the Deputy-Commissioner, Darjeeling. Applications for a licence to shoot should be made to the General Secretary to H.H. the Maharaja of Sikhim, Gangtok.

The State of Sikhim (Sukhim or "New-house"; in Tibetan, Den-jong, or "the rice country"), situated to the N. of the Darjeeling District, has an area of 2818 sq. m., and in 1921 had a population of 81,721 persons—chiefly Brahmanic Hindus (54,535) and Buddhists (26,788), also 370 Christians and 20 Musalmans. Gangtok (5800 ft.), the residence of the Maharaja and the Political Officer, is the capital. The present Maharaja Sir Tashi Namgyal, K.C.I.E. (born 1893), is the youngest son of Maharaja Sir Thutob Namgyal, K.C.I.E.; he succeeded his half-brother, Maharaja Sidkeong Namgyal, C.I.E., in December 1914.

There are, in Sikhim, only 528 villages and 14,777 occupied houses. The high mountains, as viewed from Darjeeling, have been described above (p. 486), but the lower hills also contain much beautiful scenery, and possess features of special value for all who take delight in Alpine travel, or are interested in the pursuit of botanical studies, butterflies, and some branches of zoology (reptiles, birds, mammals). "**Sikhim**¹. . . is estimated to contain about 4000 species of flowering plants under 160 natural orders; also 250 ferns and their allies, of which eight are tree-ferns." It has also 660 recorded species of orchids, 20 of palms, and about 23 of bamboos. The flora and the trees vary according to the three zones—the subtropical from 700 ft. to 4000 ft. elevation, the temperate from 4000 ft. to 11,500 ft., the Alpine from 11,500 ft. to 18,000 ft. Butterflies are extremely abundant, distributed among about 600 species; the moths are estimated at 7000 species.

The 44 monasteries present objects of interest to students of religions and lovers of the picturesque. Lamaism, or Tibetan Buddhism (a mixture of orthodox Buddhism with a preponderating amount of mythology, mysticism, and magic), is the State religion of Sikhim, professed by a large number of the inhabitants. The monks number about 1200. The principal monasteries are—(1) Sangachelling; (2) Pamiongchi; (3) Tashiding; (4) Phodang, at Tumlong; (5) Rhumtek, 8 m. from Gangtok. Many *chortens* (cenotaphs in memory of Buddha or canonised saints) are met with, as well as *mendongs*, or low prayer-walls, faced with blocks bearing the mystic sentence *om mani padme hum* and other prayers, in addition to rough paintings of the deities.

¹ *Imperial Gazetteer*, 1, 166.

The abnormal rainfall of Sikhim, amounting to 30 in. annually in the dry upper valleys, but reaching to 180 in. in some other parts, renders travelling arduous and disagreeable during the monsoon months; though the rain-water runs off the sloping roads and paths, the rivers are swollen (as they also are when the higher snows melt) and the atmosphere is laden with clouds and moisture. Travelling in Sikhim should therefore be undertaken before and after the rainy season. Those wishing to climb the snow-mountains should choose May or October.

The main route into Sikhim is *viâ* Siliguri and the cart-road alongside the course of the Teesta River to Rungpo, and up the course of the Rongnye River to Gangtok. The Darjeeling-Himalayan Railway extension runs from Siliguri to within $1\frac{1}{2}$ m. of the Teesta Bridge below Kalimpong (p. 484).

From Darjeeling Sikhim can be entered by four routes—(a) to Phalut (already mentioned) and on to Chiabhanjan, thence Northwards to Yampung, Jongri, and the snow-line, or Eastwards to Dentam and the Sangachelling, Pamiongchi, and Tashiding monasteries; (b) by the iron suspension bridge over the Rummam River, below Darjeeling, to Chakung, N. of and near to that river, and to the same monasteries; (c) by the iron suspension bridge at Manjitar, over the Great Rangit, to Namchi, Temi, Gangtok, and on to Tumlong; (d) by Pashoke and the Teesta suspension bridge to Kalimpong, Rikyisum, Pedong, and Rhenok, where the road bifurcates, one leading N. to Pakyong and Gangtok, the other N.E. to Chumbi, in Tibet, *viâ* Sedonchen, Lingtu and the Jelep Pass.

From Gangtok the track is continued Northwards to Toong and Chungtang, where it divides into the Lachen and Lachung valleys. The path up the Lachen leads

to Tangu, Gyangong, and the Kangra La and Sebu La passes into Tibet; by the Lachung to the Ghora-la and Donkya-la.

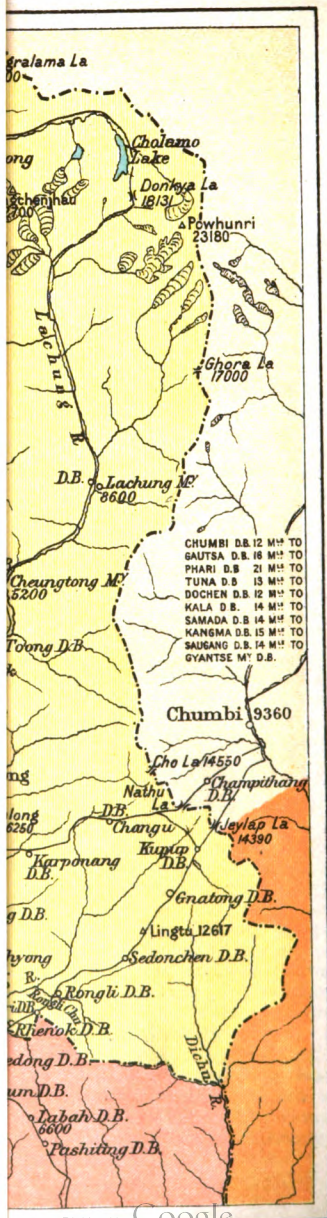
These routes are further indicated in the following statement. On all of them there are D.Bs. in charge of *chaukidars* (custodians). There are four beds in each bungalow, and the simplest furniture, but no food-supply can be relied on (though chickens, eggs, and milk may be obtainable), so that provisions and bedding must be taken. The country is so sparsely inhabited, and the traveller is so dependent on coolies and ponies for transport, that no journey should be undertaken in Sikhim without previous communication with the Deputy-Commissioner of Darjeeling or the Political Officer in Sikhim (address Gangtok).

The bungalows are available only to persons provided with passes, issued, for the Sikhim bungalows, by the Political Officer in Sikhim or by the Deputy-Commissioner of Darjeeling; for the Darjeeling bungalows, by the Deputy-Commissioner of Darjeeling; for certain Darjeeling bungalows, by the Executive Engineer, P.W.D., Darjeeling.

A separate pass must be obtained for each occupant for each bungalow, whether going or returning.

Fees.—Eight annas for each person for occupation during the day, up to a maximum charge of Rs.6. Rs.2 per night for each occupant. (For Senchal, Rs.3 per night per person). Fees are payable in advance, on the submission of the application for the pass.

Details as to *Fees, Furniture, Provisions, Servants, Tours, and Rates* are fully set out in the official Notice regarding travellers' bungalows in Sikhim and the Darjeeling District, obtainable from the Deputy-Commissioner of Darjeeling.



Routes into and in Sikkim.

(D.B. = Dak Bungalow,
My. = Monastery.)

Route I.

There is a railway as well as a cart-road from Siliguri to the Teesta Bridge, and a cart-road from the Teesta Bridge to (a) Gangtok, (b) near Pedong.

Siliguri (D.B.) by road 16½ m. to
Kalijhora (D.B.) . . . 5½ "
Berrik (D.B.) . . . 4½ "
Riang (D.B.) . . . 5½ "
Teesta Bridge (D.B.).

Route II.

Darjeeling . . . 14 m. to
Lopchu (D.B.) . . . 4½ "
Pashoke (D.B.) . . . 4 "
Teesta Bridge (D.B.) . . . 3 "
Melli (D.B.) . . . 11 "
Rungpo (D.B.) . . . 5 "
Sankokola (Bardang)
(D.B.) . . . 7 "
Shamdong (D.B.) . . . 12 "
Gangtok (D.B.) . . . 13 "
(Raiotdong) Dikchu
(D.B.) . . . 11 "
Singhik (D.B.) . . . 9 "
Toong (D.B.) . . . 5 "
Chungtong (My., D.B.).

From—

Chungtong (My., D.B.)
(a) 12 m. to Lachen (D.B.),
13 " *Tangu (D.B.),
(b) 10 m. to *Lachung (D.B.),
18 m. to Yumtang.

From Gangtok to Tumlong (and
no farther), 13 m.

* Tents are required beyond Tangu and
Yumtang.

Route III.

Teesta Bridge (D.B.). 10 m. to
(6 m. by bridle-path)
Kalimpong (D.B.) . . . 12 m. to
Rikyisum (D.B.) 7 m. }
to Labah . . . 2 " } Branch to the
Pashiting (a forest Duars.
bungalow here). }

From—

Kalimpong (D.B.) . . . 12 m. to
Pedong (D.B.) . . . 5 "
Rhenok (D.B.) . . . 9 "
Pakyong
(D.B.) 11 m. to } Junction Road
Gangtok (D.B.) . . . } to Gangtok.

From—

Rhenok (D.B.) . . . 3 m. to
Ari (D.B.) . . . 4 "
Rongli (D.B.) . . . 9 "
Sedonchen (D.B.) . . . 9 "
Gnatong (D.B.) . . . 5 "
*Kupup (D.B.) . . . 10 "
Changu (D.B.) . . . 12 m. to
Champithang
(D.B.) . . . 11 m. to }
Chumbi (D.B.) 131 " } in Tibet.
Gyantse.

* 16 m. to New Yatung.

From—

Changu (D.B.) . . . 11 m. to
(Karponang) Pusum
(D.B.) . . . 9 "
Gangtok (D.B.).

Route IV.

Darjeeling . . . 12½ m. to
Jorpokri (D.B.) . . . 10 "
Tonglu (D.B.) . . . 14 "
Sandakphu (D.B.) . . . 12½ "
Phalut (D.B.) . . . 17 "
Dentam (D.B.) . . . 11 "
Pamiongchi (My., D.B.) 10 "
Rinchinpong (My., D.B.) 13 "
Chakung (D.B.) . . . 20½ "
Darjeeling.

(There is a direct road from
Dentam (13 m.) to Rinchin-
pong (My., D.B.).

Alternative Route.

Pamiongchi (My., D.B.) 10 m. to
Kewzing (D.B.) . . . 10 "
Temi (D.B.) . . . 11 "
Namchi (My., D.B.) . . . 7 "
Manjitar (D.B.) . . . 3 "
Badamtam (D.B.) . . . 7½ "
Darjeeling.

From—

Temi (D.B.), (by an iron
suspension bridge
over the Teesta) . . . 11 m. to
Song (D.B.) . . . 14 "
Gangtok.

Excursion into Tibet (Gyantse).

Permission to cross the frontier into Tibet must be obtained from the Secretary to the Government of India in the Foreign Dept. at Delhi. *Shooting and sport of all kinds are prohibited.* The expedition should not be attempted between September and May.

Kalimpong (p. 484) makes the best starting-point. The track goes past Pedong and Rhenok, thence N.E. to Rongli, Sedonchen and Gnatong (12,000 ft.) as in Route III. Between Gnatong and Champithang (in Tibet) the Jeplela is crossed (14,400 ft.); Chumbi is 11 m. from Champithang and Phari Jong (14,300 ft.) is 28 m. farther on. The route thence to Gyantse (13,200 ft., D.B.), where the principal British Trade Agent resides, crosses the Tang-la (15,200 ft.) and, 42 m. beyond, the Kharola (16,500 ft.) and then the Khamba-la (16,800 ft.). Gyantse (131 m. from Chumbi) must be the limit of the expedition, as permission is not given to visit Lhasa (12,090 ft. above sea-level, 359 m. from Siliguri).

Transport animals can be arranged for at the Himalayan Hotel, Kalimpong; usual rate, Rs.12-3-0 to Yatung. From Yatung to Phari it is best to arrange for a fresh set with the assistance of the British Trade Agent at Yatung (one clear day's notice should be given): rate Rs.3 per animal, or Rs.2-8-0, if more than three animals are engaged. From Phari to Tuna (21 m.) the rate is Rs.2; for the next five stages (13 m., 12 m., 14 m., 14 m., 15 m.) the rate is Rs.1 a stage; and for the last stage, Sangang to Gyantse (14 m.) Rs.1-3-0. The traveller will be well advised to bring his own saddle. Glare-glasses are essential. Provisions and bedding must be taken. Passes for D.Bs. in Tibet are issued by the British Trade Agent at Yatung.

(2) Calcutta to Dacca via Goalundo and Narainganj.

Mail train and steamer in 16 hrs.; fare to Dacca, 1st class, Rs.32-9-9, single; Rs.49-0-6, return; Rs.45-9-3, week-end return.

[For the journey from Calcutta to **Poradaha** junction station (103 m.) see p. 483.]

155 m. **Goalundo Ghat*** station, terminus of the E.B.R., is about 10 m. S. of the junction of the Ganges and Brahmaputra Rivers, which below this point are called first the Padma, and then the Meghna River, and form a body of water so wide across that in the centre the low shores are scarcely visible.

Goalundo has no permanent buildings, as the river-banks at this point have for many years past changed constantly. Lines radiate from Rajbari Stn., and the site of the terminal station is frequently shifted.

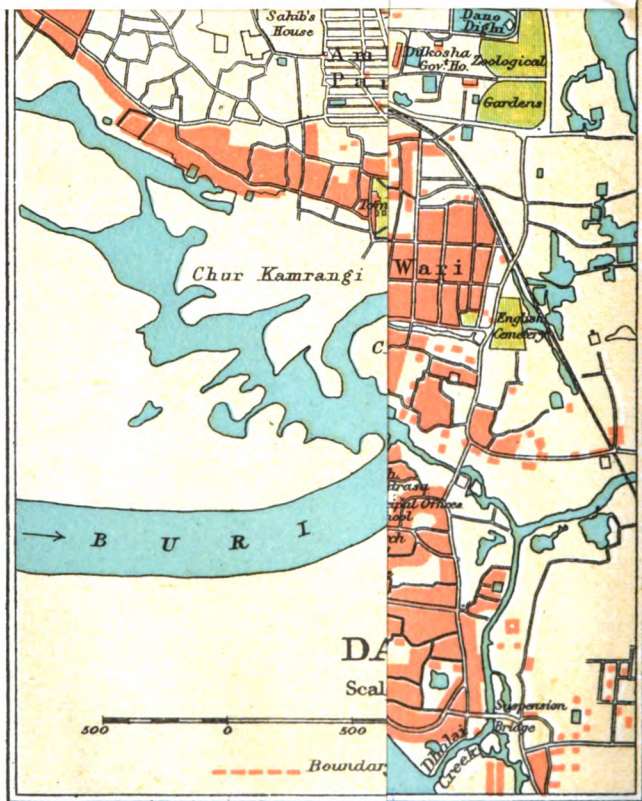
"About £130,000 had been spent upon these protective works, and it was hoped that engineering skill had conquered the violence of the Gangetic floods. But in August 1875 the solid masonry spurs, the railway station, and the magistrate's court, were all swept away, and deep water covered their site." (Hunter.)

There is a regular daily service by steamer in 6 hrs. to 9 hrs. to *Narayanganj* (104 m.) for *Dacca*: and to *Chandpur* for *Chittagong* and *Assam* by railway, in 7 hrs. Cabin accommodation and messing arrangements are satisfactory.

Narayanganj (D.B., pop. 30,602) on the Lakhya, is the port of Dacca, and has a large trade, particularly in jute, for which it is the great mofussil centre. Near it there are some old forts of Mir Jumla's, and opposite the town,



Jham Jham," whose mate, Bibi When the Generals of the



Trade Agent at Yatung.

on the E. bank of the Lakhya, the celebrated shrine of Kadam Rasul.

There is a considerable number of European residents, and several European firms, engaged in the jute trade. A Subdivisional officer is stationed here. Munshiganj is the headquarters of another Sub-division. The Idrakpur fort, built by Mir Jumla in about 1660, is still in good condition, and the Subdivisional officer's residence has been built on the roof.

From Narayanganj the railway runs, 11 m. to

Dacca (23° 43' N. and 90° 24' E.) (D.B., good, near ry. stn.) The city, with a population in 1921 of 119,450, lies on the N. bank of the Buriganga River, along which it extends for nearly 4 m. from beyond the Lal Bagh on the W. to the suspension bridge over the Dholai Khal (Creek) on the E., presenting an imposing river frontage. From Calcutta it is 270 m. distant. The city is also connected by rail through Mymensingh with Darjeeling and Assam; but this route is not recommended.

Along the central portion of the river front runs a fine promenade, called the Buckland Bund, after Mr C. T. Buckland, who was Commissioner, 1862-67. Behind it are the palace of the Nawabs of Dacca, on the site where the French factory stood, and the town residences of many of the chief zamindars of the district. Here, too, within a short distance, are many important buildings, the Bank, the Commissioner's office (which was once the European Club), the Collegiate School (formerly Dacca College), on the site of the English factory, the Courts and Government cutcherries, the English Church, the Baptist Mission buildings and the Roman Catholic Cathedral. At the Sadar Ghat on the Buckland Bund stands an ancient cannon. Tradition has it that this is a male gun, "Kale Jham Jham," whose mate, Bibi

Mariam, lies at the bottom of the river, and calls to him every night, and thus causes the mysterious sound known as the "Barisal guns." A broad road runs due N. from the Sadar Ghat to the new Civil Station of Ramna. The Bara (great) Katra, a large building of fine architecture, stands on the bank of the river, which it faces with a striking front. It was built in 1644 by the Dewan Mir Abdul Kasim, and seems to have been intended for a royal residence. From the roof an interesting view of the city and river is to be had. About 100 yds. E. of this is the Chhota (little) Katra, built by Shaista Khan in 1663.

S.E. of these buildings is the Mitford Hospital, on the site of the Dutch factory. A short distance to the N.W. is the most picturesque monument of Dacca, the Lal Bagh fort, built by Muhammad Azam, third son of Aurangzeb, when Viceroy of Bengal, in 1678, but left unfinished. Aurangzeb afterwards gave it as a *Jagir* to Shaista Khan, whose daughter, Pari Bibi, lies buried in a fine tomb within the fort. Here, in 1857, two companies of the 73rd Bengal Infantry, having become disaffected, were attacked and defeated by sailors of the Indian Navy, helped by the Dacca Volunteers.

Amongst many other interesting monuments at Dacca are: the *Husani Dalan*, built by Mir Murad in 1642. Here the Muharram is celebrated annually with intense fervour. The *Temple of Dhakeswari*, the most famous Hindu shrine in these parts. The *Sat Ganbaz* (seven domes) mosque, some 6 m. W. of Dacca, said to have been built by Shaista Khan, with the Sat Gumbaz Mausoleum 100 yds. E. of it, containing two tombs, where two of his daughters are said to be buried. There is a good **museum** of Archæology and Natural History.

When the Generals of Akbar con-

quered Eastern Bengal in 1575, the capital of the province was at Sonargaon, some 20 m. E. of Dacca, where there are still many interesting ruins. In the reign of Jahangir the capital was transferred to Dacca, by the Governor, Islam Khan, grandson of Shaikh Salim Chishti. The English factors settled here first in 1666, and not long afterwards were subjected to great oppression by the Governor, Shaista Khan, nephew of the Empress Nur Jahan. In 1704 the Court moved to Murshidabad, and the glory of Dacca grew dim, until in 1905 it revived, but only for a few years, when Dacca became the capital of the new province of Eastern Bengal and Assam, and European officials gradually left the old town for the new quarter of Ramna, where many fine buildings, including two Secretariats and two Government Houses, of which the larger is now the University Court House, were erected. Ramna, N. and W., of the old city, is a pleasant open place, with many trees, and a breeze which rarely fails to blow. There is a spacious Maidan, with a race-course, a golf-course and polo ground. The Club is to the N. of the Maidan; the Dacca University area lies mainly to the S. and W. The University of Dacca, a residential and unitary University, was opened in 1921; has an area of 600 acres; and possesses 90 teachers and 1170 students. It inherited the old Dacca College; and has three residential halls. The Science laboratory is well worth a visit.

In 1912, at the repartition, the new province disappeared, and Dacca is no longer a capital, but only the largest Civil Station in Bengal outside Calcutta. The city is by repute a healthy place, being almost free from malaria, and fortunate in its seldom-failing breeze. It has the atmosphere of a romantic past. Its bazars are very good and very inter-

esting. The shell bracelets of Dacca are famous, and may be seen here in the making. The flimsy muslins "*abrawan*," "*bafthawa*," "*Shabnam*," "running water," "woven air," "evening dew," once so celebrated, are now not often produced, and the art of weaving them seems to be dying out. Of other less costly muslins there is still a considerable output. Silver filigree work of good quality is done, and there are some promising new industries, such as the making of buttons.¹

At Kurmitola, 10 m. distant by road, a forest begins, which stretches N. for over 100 m. to Tangail. Leopards may frequently be had within 10 m. of Dacca, and tigers a little further off, but the country is not suitable for pig-sticking. Ducks are plentiful in parts, but snipe are very scarce.

In the rains much of Dacca District is under water.

The railway from Dacca proceeds N. to

76 m. Mymensingh station (R.) Mymensingh is the most populous District in India, containing (1921) 4,837,730 souls. It is noted for its production of a quarter of the total jute crop grown in the jute-producing districts of Bengal, which was 2,702,300 acres in 1928.

130 m. Jagannathganj. The Assam steamer, leaving Goalundo in the early morning, reaches Jagannathganj the following forenoon. Ferry to Sirajganj Ghat (p. 484).

From **Singhiani** (108 m. from Dacca on the Dacca-Mymensingh and Jagannathganj line) there is a branch to Bahadurabad Ghat (ferry to Tistamukh Ghat). A line (A B. Ry.) also runs from Bhairab Bazar (p. 495) to Mymensingh, *viâ* Kishorganj and Gouri-gram (whence a branch to Netro-

¹ See *The Romance of an Eastern Capital*, by F. B. Bradley-Birt (2nd ed., G. Bell, 1914).

kona). Another branch connects Bhairab Bazar with Tangi on the Dacca-Mymensingh line.

(3) **Calcutta by Goalundo and Chandpur to Chittagong by Assam-Bengal Railway.**

Mail train and steamer in 24 hrs. Fare to Chittagong, 1st class, Rs. 48-1-6 single; Rs. 72-4-0 return. The route as far as *Goalundo* is the same as that taken by the Dacca mail (p. 492). From *Goalundo* there is a regular service of steamers to *Chandpur* (D.B.), which connects with the mail train. There is also a direct steamer communication from *Narayanganj* (8 m. by rail from Dacca) in 4½ hrs. From *Chandpur* the Assam-Bengal Railway runs to

32 m. **Laksam** junction station. Here the S. branch of the line runs to

81 m. **Chittagong** station, the S. terminus. It is the chief town of the Division and District of the same name, and came into British possession by cession in 1760. It was once part of the Hindu kingdom of Tippera, was burnt by the Portuguese in 1538, was recaptured by the Mughals from the Raja of Arakan in 1668, and was the cause of the First Burmese War. The port, 12 m. from the sea up the *Karnaphuli* River, is a good one, with a trade of over 14 lakhs in 1926-27. Steamer service up the river to *Rangamati*, headquarters of the Chittagong Hill Tracts. Sea-going steamers to *Cox's Bazar* (excellent sea-bathing) and *Rangoon*. There are 27 tea-gardens in the Chittagong District.

From **Laksam** branch lines run: S. to *Noakhali*, 31 m., hdqrs. of a District; N. to 15 m., *Comilla* (D.B.), headquarters of the Tippera District, 44 m., *Akhaura*, 124 m., *Kulaura*, and 171 m., **Badarpur**.

From *Akhaura* a branch runs N.W. to *Ashuganj Ghat*, whence ferry to *Bhairab Bazar* (p. 494), on the *Meghna R.*, with bifurca-

tion from that place to *Dacca* and *Mymensingh*.

From *Badarpur* a branch line, 18 m., runs to

Silchar (D.B.) (population 10,204), hdqrs. of the **Cachar** District, annexed in 1830 and now part of Assam. Branch line from *Kulaura* to *Sylhet Ghat*, 30 m., for **Sylhet** (D.B.) (pop. 16,912), on the lower valley of the *Surma* River. There is a steamer service from *Narayanganj* to *Fenchuganj Ghat* on this branch; also from *Markuli* to *Chhatak* (I.B.)-throughout the year, and a feeder and steamer service from *Chhatak* to *Sylhet* during the rainy season. Both *Sylhet* and *Silchar* have suffered severely from earthquakes. The two Districts of *Sylhet* and *Cachar* form between them the **Surma Valley**. *Cachar*, which is in the E. angle, contains one hill subdivision, the *N. Cachar Hills* (p. 501); *Sylhet* is wide and flat, except in the extreme N. and S., and recalls the plains of Bengal. There are numerous tea-gardens in the *Surma Valley*.

The main line of the Assam-Bengal Railway continues N. from *Badarpur* to (115 m.) **Lumding Junction** (p. 498).

(4) **Calcutta to Shillong and the Assam Valley. Circular Tour; Calcutta (Sealdah) by E.B.S. Ry. to Santahar Junction, Amingaon, and Gauhati (for Shillong); thence by Assam-Bengal Ry. to Lumding Junction, Manipur Road (for Manipur), Tinsukia Junction and Dibrugarh. Return: by Assam-Bengal Ry. to Lumding Junction, thence to Lower Haflong, Badarpur, Laksam Junction, Chandpur, Goalundo and Calcutta (Sealdah): alternative route by steamer on the Brahmaputra River.**

The "through" river services from *Goalundo*, once the only

means of approach to all parts of Assam, have now been superseded by the railways for the purposes of all ordinary travellers. But for those who can spare the time, no pleasanter method of travel can be suggested. The steamers have comfortable cabins, and the messaging arrangements are satisfactory. Travellers must remember that the cold wind caused by the movement of the vessel may be penetrating, and that warm clothes are therefore necessary.

The circular tour, by rail, comprises the whole of the Assam Valley and includes a visit to Shillong and Manipur.

Assam was under the Lieutenant-Governor of Bengal until 1874-5, when the Districts of the Brahmaputra Valley and the adjacent hills, with Cachar and Sylhet (the Surma Valley), were constituted a separate Province under a Chief Commissioner. On the partition of Bengal in 1905 the new Province of Eastern Bengal and Assam was created, with a population of 31 millions (18 millions being Muhammadans) under a Lieutenant-Governor. In 1912 the Eastern Bengal Districts were rejoined to Bengal (to form the Governorship of Bengal) and the old Province of Assam was reconstituted, with twelve Districts and the Manipur State, under a Chief Commissioner, and from 1921 under a Governor. Sir John H. Kerr became Governor on the 11th Oct. 1922, and was succeeded in 1927 by Sir Laurie Hammond, K.C.S.I., C.B.E. The area, exclusive of the partially administered territories on the N. and N.E., is 63,510 sq. m., of which 8564 sq. m. form the State of Manipur. The total population of the Province in 1921 was 7,990,246, all of whom are in British Districts, except 384,016 persons in the Manipur State. This population included 4,362,571 Hindus; 2,219,947 Muhammadans (mostly in the Surma Valley); 132,106

Christians; and 1,256,641 Animists, who are mainly to be found in the hill-tracts (Garos, Nagas, Khasis, etc.).

"Assam¹ owes its importance to its situation on the N.E. frontier of India. It is surrounded by mountainous ranges on three sides—on the N. are the Himalayas, shutting off the table-lands of Bhutan and Tibet; on the N.E. is a series of hills which form a barrier between the Upper Brahmaputra Valley and the more or less independent Mongolian tribes who live W. of the boundary of China; on the E. and S. lie the hills which march with those forming the limits of the Province of Burma and the State of Hill Tippera; on the W. lies the Province of Bengal, on to the huge plains of which debouch the two valleys of the Brahmaputra and the Surma, which form the plains of Assam. These two valleys are separated from each other by the Assam range, which projects westward from the hills on the Eastern border. The physical features of the Province are full of variety. The valley of the Brahmaputra, otherwise known as the Assam valley, on the N. is an alluvial plain about 450 m. in length and 50 m. in average breadth, so that one never loses sight of the hills on either side. Mongolian influences are present everywhere, except in the greater part of Sylhet. In language there is perhaps more diversity on the Eastern frontier than exists in any other part of India."

Calcutta to Gauhati, Shillong, and Dibrugarh.

Mail train to Shillong in 26½ hrs.; fare: by No. 1 Service, *via* Amincaon and Pandu, Rs. 73-6-0, first

¹ Assam Report, census of 1911. Anyone specially interested in Assam should consult Sir E. A. Gait's *History of Assam* (Calcutta, 2nd Edn., 1926). See also *Sport and Service in Assam and Elsewhere*, by Lt.-Col. Alban Wilson (Hutchinson, 1924).

glass single; Rs.122-2-3, ordinary return (one month); Rs.101-15-0, week-end return. Fare to Dibrugarh, *via* Pandu and Tinsukia; Rs.102-1-6, first class single; Rs.153-3-0, return.

The direct route to Gauhati from Calcutta (Sealdah) follows the same course as that to Darjeeling (p. 483) as far as

173 m. Santahar junction.

It then swings E. past 198 m. **Bogra**, 269 m. **Kaunia** (D.B.), and 272 m. **Teesta** jn., crossing the Teesta by a bridge 2100 ft. long to

280 m. **Lalmanirhat** (Refreshment-room and D.B.), junction for the Bengal-Duars Ry. (p. 484).

288 m. **Gitaldaha** junction; a branch line runs N. to Cooch Behar (D.B.), Alipur Duar, Buxa Road, and Jainti. The Chief of Cooch Behar is H.H. Maharaja Jagadipendra Narayan Bhup Bahadur, born 1915, and succeeded in 1922. The State, which is famous for its big-game shooting, has an area of 1307 sq. m., a population of 592,000, and a revenue of 35 lakhs.

The Assam line turns E. again, round the elbow of the Brahmaputra, to

312 m. Golakganj junction.

Branch to (324 m.) **Dhubri**, whence steamers run to Gauhati by Goalpara, the journey of 130 m. occupying about 30-36 hrs. Travellers can proceed by steamer to **Tezpur**, the next day to **Nigriting**, and about 24 hrs. later will reach **Dibrugarh** (p. 501).

The scenery on the Brahmaputra is moderately pretty only; on the right (left river-bank) are the Garo Hills, and away on the left, if the atmosphere is clear, the grand range of the Himalayas towers in the background, with the wooded Bhutan Hills in the middle distance; the snowy range is visible all along the river, and shows to special advantage

at sunrise. At **Goalpara** (D.B.), situated at the foot of a conical hill (left bank), may be seen picturesque merchants and wild hill tribesmen, who come down from the mountains to trade.

From **Golakganj** the line runs at a distance from the river to (387 m.) **Sorbhog**, and at

455 m. **Amingaon**, on the **Brahmaputra**, the river is crossed by a railway ferry to

456 m. **Pandu**; thence by rail or motor car to

461 m. **Gauhati** (D.B.); once the capital of the Ahom (Shan) kings, now the headquarters of Kamrup District and of the Assam Valley Division. It possesses a First-grade College (named after Sir Henry Cotton, Chief Commissioner of Assam from 1896 to 1902, whose bust by Armstead is in the hall), a Law College, and numerous schools. The place was almost destroyed by the earthquake of 1897, but no signs of this catastrophe are now visible. The situation of it, on the S. bank of the Brahmaputra, which here resembles a lake with mountains and wooded shores, is very pretty. In the middle of the river are the island and temple of Umananda, and on the N. bank, on a projecting ridge, is another temple on the top of a hill approached by winding flights of steps. The celebrated temple of Kamakhya, on the Nilachal Hill, 2 m. below the town, is the resort of numerous pilgrims from all parts of India. The magnificent views repay a visit.

River steamers call daily, *en route* up and down stream.

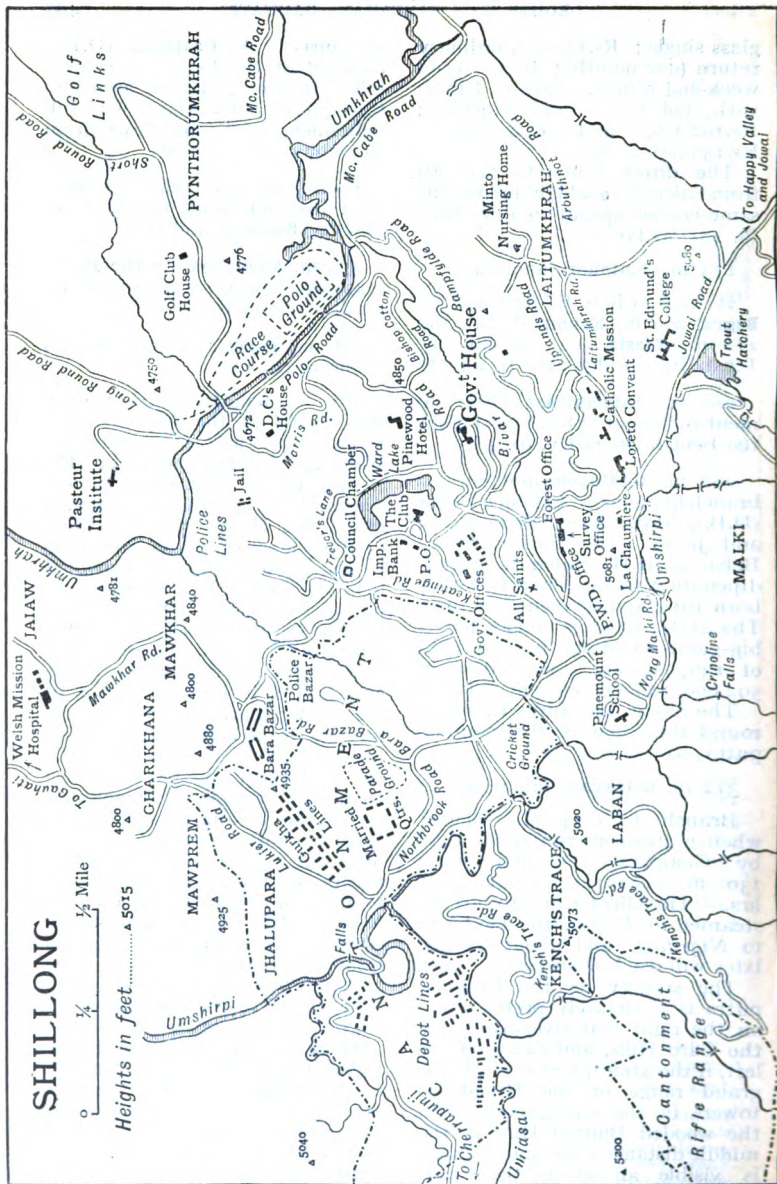
There is a daily motor service by a good road (63 m.) from Gauhati S. to Shillong. Motor owners should consult the *Motor Manual for Shillong and Neighbourhood* (obtainable on ferry steamer at Amingaon).

The cars leave the railway sta-

SHILLONG

0 1/4 1/2 Mile

Heights in feet..... Δ 5015



tions at Pandu and Gauhati, and the journey from Calcutta now takes only about 27 hrs. Cars for luggage and servants accompany the first-class passenger car. Fares by motor, which makes the 68 m. from Pandu to Shillong in $5\frac{1}{2}$ hrs.—Rs. 24 first class; servants, Rs. 10; only hand baggage allowed in passenger cars; luggage may be booked in advance. The road from Gauhati runs through tropical forest, rolling grassy downs, and great pine-woods; the journey is charming.

Shillong, * (pop. 17,203) headquarters of the Assam Administration, with a Pasteur Institute, is situated in lat. $25^{\circ} 34'$, long. $91^{\circ} 53'$ (4900 ft.) The entire town was wrecked by an earthquake in 1897; but it has been rebuilt with due precautions against the recurrence of such a disaster and has grown rapidly in favour as a summer resort. It is tastefully laid out amongst the pine-woods that clothe the hill from which it takes its name. The surrounding country is not unlike the lowlands of Scotland, and there are excellent golf-links, a fine polo ground and race-course, and opportunities for riding and driving which cannot be enjoyed at Himalayan hill stations. The walks are equally delightful. The average rainfall is 81 in. The temperature in the height of summer rarely reaches 80° F. There are several hotels under English management. A flourishing Welsh Presbyterian Mission has been established here for many years. The Khasis, who inhabit the District (known as the Khasi and Jaintia Hills) speak a language of which the nearest affinities are as far distant as Cambodia and Annam; they are remarkable also from the fact that descent to property is traced through the female line, as on the Malabar coast (p. 680). Their dancing, which takes place at certain festivals, especially during the month of June, is as

picturesque as any in India. It is seen at its best at the village of Nong Krem, a march of about 13 m. from Shillong.

Shillong is connected by a motor road with **Cherrapunji** (4455 ft., D.B.). This place is famous for the highest annual rainfall in the world—426 in.; in 1861 an extraordinary record amounted to 905 in., of which 366 in. fell in July alone. From Cherrapunji a steep road leads in 10 m. to Theria, in the Surma Valley, and so to Sylhet. Daily motor service from Shillong to Cherrapunji.

From Pandughat (Gauhati) to Manipur and Dibrugarh by the Assam-Bengal Railway.

Pandu is the terminus of a branch of the Assam-Bengal Ry., which runs past Gauhati to (57 m.) **Chaparmukh** Junction, whence there is a line to (17 m.) **Nowgong** (D.B.), 74 m. from Gauhati, and 662 m. from Calcutta. The line continues to Silghat (D.B.), on the Brahmaputra, 103 m. from Gauhati. The method of transit for heavy packages is usually by steamer from Calcutta to Silghat, thence by road (32 m.) or train to Nowgong.

The Assam Trunk Road traverses the Nowgong district; motorable in the cold weather.

From Chaparmukh the main branch line proceeds to (113 m. from Gauhati) **Lumding** Junction, where it connects with the hill section which comes up from Badarpur Junction (p. 495). From Lumding Junction the line runs N.E. to (33 m.) **Manipur Road** (Dimapur) station. There are carved monolithic remains in the old Kachari fort at Dimapur.

Manipur.

From Manipur Road (Dimapur) the main road to Manipur (134 m.) runs S. not far from the old (now

abandoned) fort of **Samaguting** and **Kohima** (46 m.). The road is metalled throughout and fit for light motor traffic except after heavy rain. Motor lorries leave Manipur Road for Imphal and Imphal for Manipur Road (seat, Rs.8) A lorry can be hired Rs.85. Motor owners can make the trip comfortably in two days, halting for the night in Kohima. The road ascends 5700 ft., and then descends to the valley, the last 15 m. being level. The grades are easy, but the corners are sharp. The distance to Imphal is 134 m., and there are twelve well furnished R.Hs. (no servants) at convenient distances. At Manipur Road there are a D.B. and small bazar, and at Kohima (46 m.) supplies are also obtainable, but these are the only two places where anything can be procured. Cart rates, for carts carrying 10 maunds each, are Rs.18-24 for the up-journey, and Rs.24-30 for down journey. Carts take 10-12 days.

Imphal, the capital of the State of **Manipur**, lies in a lovely valley, which is some 60 m. long and 30 m. wide, at a height of 2600 ft. above sea-level. It was the scene of a lamentable disaster in 1891, when Mr Quinton, Chief Commissioner of Assam, and several other officers were captured by treachery and murdered. The State covers an area of approximately 8456 sq. m., with a pop. of 334,016, and an annual revenue of nearly 8 lakhs. The present Maharaja, H.H. Chura Chand Singh, C.B.E., was born in 1885 and succeeded in 1891. There is a British Political Agent at Imphal. The scenery on the valley and on the roads leading to it is most beautiful. The valley is surrounded by hills, which rise from 2500 ft. to 5000 ft. above it. The whole drainage of the valley and the surrounding hills escapes at the Southern end of the valley through a gorge in the hills only a few

hundred yards wide. There are several large lakes, on which in the cold weather magnificent duck shooting is obtainable. In the swamps round these lakes a species of *Thamin* is to be found, but the shooting is difficult and fatiguing, and can only be indulged in during March, April, and May, when the swamps are at their driest.

The people of Manipur are very fond of games. Hockey and polo are played everywhere, and the religious dances are most interesting spectacles. (See *Naga Tribes of Manipur*, by T. C. Hodson, Macmillan, 1911.)

From Imphal good bridle-roads, with R.Hs. (unfurnished and temporary) at every 13 m. or 14 m., lead to (125 m.) Silchar (p. 495) and Sittaung in Burma, on the river Chindwin (102 m.) The journey from Silchar to Imphal occupies nine days.

If ample notice is given to the Political Agent, carts can be arranged for at Manipur Road station and coolies at Silchar. A cart carries 10 maunds; the charge for the journey to Imphal is Rs.18 to Rs.24. Coolies carry 60 lb., and the charge per coolie from Silchar to Imphal is Rs.5, as.8.

From Manipur Road the line runs to Titabar and Mariani (from Titabar and Mariani two short branches of the Jorhat Ry. run *viâ* Chenimara Jn. to Jorhat and thence to Kokilamukh on the Brahmaputra), and then 96 m. more to **Tinsukia** (D.B.), whence one branch, dividing at Makum, runs N. to Talap (D.B.) and to Saikhoaghat, on the river Luhit, opposite Sadiya, and S. through Digboi to Margherita (D.B.), called after the Queen of Italy, where the Assam coalfields are situated; the output of the Assam collieries in 1926 was 301,061 tons. 5 m. farther E. the line ends at Ledo, which is the nearest station for **Tikak**; here the coal is dug out of

the hillside. To the N.W. of Margherita the colliery line has been extended to Tipong and Lakhapani (8 m.) where new seams are being opened. At Digboi are oilfields, where oil is also refined; the output of petroleum in Assam in 1926 was 24,098,535 gallons.

From Tinsukia another branch (27 m.) connects the Assam-Bengal Ry. line with

Dibrugarh, the headquarters of the Lakhimpur District (pop. 588,295), and of the Assam Valley Light Horse. It is also the terminus of the river steamer service from Goalundo. Dibrugarh is one of the most attractive places in India. It has been truly said that this remote spot at the upper end of the Brahmaputra Valley, is more like a colony than any other place in India on account of its large European population and the extent of their industrial enterprise. From Dibrugarh the return journey to Calcutta can be made very enjoyably by river steamer to Gauhati, and thence by train from Amingaon, as on the upward route (p. 497). Alternatively, if time is an object, the journey can be taken by rail from Dibrugarh to Tinsukia and thence to (207 m.) Lumding and (437 m.) Badarpur by the hill section of the Assam-Bengal Railway.

130 m. from Lumding on the hill section and 100 m. from Badarpur (p. 495) is

Lower Hafong, with a remarkable loop, 12 m. long, round the hill: $3\frac{1}{2}$ m. to Hafong, hdqrs. of N. Cachar Hills and a small health resort (2300 ft.) with hotel and golf-course.

The Tea Industry.

Assam is the principal centre of the Indian tea industry. 85 per cent. of the total area under tea in India lies in the Brahmaputra and Surma Valleys and in the Bengal

districts of Darjeeling (p. 485) and Jalpaiguri (p. 484); the actual acreage for Assam in 1926 being 420,600, out of an aggregate for the whole of India of 739,700, and 194,700 for the two other districts. Of the remainder 14 per cent. (105,738 acres) is in Southern India. There were in 1926 941 gardens in the province of Assam, with an out-turn of nearly 242 million lb. of manufactured tea, as compared with 225 million lb. in 1925 and 237 million lb. in 1924. The year, however, was an exceptional one for production in many respects; weather conditions were favourable, the labour supply was more adequate, and there was an almost complete absence of serious blights. The permanent labour force amounted in 1926 to 463,847; and there were in addition 29,964 permanent and 38,213 temporary outside labourers. The figures for the whole of India were 721,168, 57,643, and 76,036. Most of the immigrants into Assam do not come under the Labour Act. The labour question is always one of great moment in Assam, where the area is great, the population sparse, and the demand for tea-garden labour continuous. But the prejudice against Assam is being gradually removed with improved conditions and attractions. Time-expired tea-garden coolies can obtain Government land for colonisation on favourable terms. The total exports of tea from India by sea in 1926-27 showed an increase of 7 per cent. upon the figures of 1925-26; 350 million lb. as compared with 326 million lb. The largest purchaser was Great Britain with 292 million lb., but a considerable proportion of this is re-exported. Direct exports from India to the U.S.A. accounted for 8 million lb.; Canada took $11\frac{1}{2}$ millions lb., and Australia 9 millions. Any traveller wishing to visit the tea-gardens will have no difficulty in obtaining an intro-

duction to some planter from friends, or through friends from some London or Calcutta agents of a tea-estate, and may be sure of a hospitable reception. The tea districts are for the most part well furnished with R.H.s. and driving-roads—many of them passable for light motor-cars during the dry season.

ROUTE 25.

CALCUTTA to MADRAS by Balasore, Cuttack, Bhubaneswar (visit to Udayagiri Caves), PURI, (and the Black Pagoda), Ganjam, Vizianagram, Waltair for Vizagapatam, Bezwada, and Nellore.

Distance 1032 m.; time occupied by mail train, 39 hrs.; fare—1st class, Rs.115-9-6.

The Calcutta-Madras mail train travels over the Bengal-Nagpur Railway from **Howrah** to **Waltair**, and the Madras and S. Mahratta Railway, N.E. section, from **Waltair** to **Madras**.

Howrah.—Calcutta (see p. 109).

20 m. **Ulubaria** (see p. 134).

35 m. **Kola Ghat** (R.). Here the railway crosses the Rupnarain River, a large tidal river flowing into the Hooghly, near its junction with which are the famous James and Mary Sands, the scene of so many wrecks in that river (p. 134). The bridge over this river, about $\frac{1}{2}$ m. in length, is a very fine one, and from the engineering difficulties met with in construction it ranks as one of the most important bridges in India.

72 m. **Kharagpur** (R., D.B.) is an important railway junction for the line to Nagpur (see Route 7). It is the seat of the

main workshops of the Bengal-Nagpur Railway, which are provided with up-to-date machinery, worked by electrical power. Over 13,000 workmen are employed, and the population of the railway settlement, which is self-contained and carefully laid out, is over 25,000 persons, speaking 14 languages. There are High Schools, Girls' School, a Railway Institute, and Technical Schools. The settlement is managed by a Committee of European and Indian employees.

From Kharagpur there is also a branch to (8 m.) **Midnapore** (D.B. $\frac{1}{4}$ m.), an old station of the E.I. Company (pop. 28,870) and headquarters of the district. This branch runs N.W. through Bankura to (103 m.) Adra junction between Sini and Asansol (p. 145). The spot in the Midnapore District originally famous was the Buddhist seaport of Tamluk (p. 135).

Ghatal.—Headquarters of a Subdivision in the District of Midnapur. Important trade centre. During the rains there is a daily steamer service from Calcutta. Steamers throughout the year proceed up to Ranichak, whence the journey is made by boats. Its chief industries are the weaving of cotton and tussore silk cloths, the manufacture of bell-metal utensils, and the preparation of coarse earthen pots.

Contai.—Headquarters of the Subdivision of the same name, 36 m. by road from Contai Road Railway Station, on the B.N.R. The S.E. of the district is a maritime tract lying along the Bay of Bengal.

Kaukhali, or Cowcolly.—A village in the Contai Subdivision, situated on the sea-coast 3 m. S.W. of Khajuri. A lighthouse was built here in 1810.

The District is full of tracts containing Sal jungle, in which

black bear and leopards are to be found. In winter snipe and duck can be shot in certain tracts.

133 m. **Rupsa Jn.** ; light ry. to Baripada and Talband (71 m.) in Mayurbhanj State.

144 m. **Balasore** (R., D.B. $\frac{1}{2}$ m., furnished), headquarters of a Civil District, is close to the railway station. Chandipur, 8 m., on the sea-coast is an ordnance station for testing shells and guns. The open sea makes this a favourite resort for residents and visitors. Various kinds of sea fish are procurable, and are sent to the Calcutta market. There are large Roman Catholic and Baptist Missions in the town, the latter managing an Industrial School. The place, of which the correct name is Baleswar, was once of great commercial importance, and the Dutch, Danes, English, and French had factories here; Pipili, in the District, was the first spot at which, in 1634, the English E.I. Company established a factory in Bengal, and from here the Balasore factory was founded in 1642, in accordance with the grant issued by the Delhi Emperor at the request of Dr Gabriel Boughton. There are two curious old Dutch tombs, dated 1683, built like three-sided pyramids, about 20 ft. high, in a small secluded enclosure near the town.

There is a fine temple at Remuna (6 m.), where pilgrims to Puri congregate.

183 m. **Bhadrak** (D.B.). From here the port Chandbali (D.B.) lies 31 m. S.E. by road; regular steamer service to and from Calcutta (Outram Ghat).

210 m. **Jajpur Road** for Jajpur, 15 m. E. (D.B.). The ruins¹

at Jajpur, once the capital of Orissa, are fine and interesting, but probably only an antiquarian will care to visit them. The chief object is a fine pillar 32 ft. high, standing on a base 5 ft. 5 in. high, square, and composed of large blocks of stone without any ornament. The shaft and capital are 26 ft. 7 in. high, and appear to be a monolith. The capital, of exquisite proportion, is carved to imitate lotus blossoms, and adorned below with lions' heads, from whose mouths depend strings of roses or beads. The capital once was crowned with a figure of the Garuda, or eagle-vehicle, of Vishnu. The Garuda is said to have been hurled from the summit of the pillar by the Muhammadans, who attempted also to destroy the pillar itself; it is now in the temple of Narsingh, 1 m. S. of the temple of Jagannath. The finest temple was that of Trilochan, the Three-Eyed; on the Binjharpur Road is a well-built ancient bridge. In the compound of the Subdivisional Magistrate, are three monolithic statues of Indrani on her elephant, Varahi with the boar, and Chamundi (p. 80) represented as the Goddess of Famine; and seven other statues, each 6 ft. high, have been placed in a temple. Near the P.W.D. Bungalow is also the fine mosque of Nawab Abu Nasir Khan, built in 1681 A.D.

There is a bungalow at Vyassoravar (18 m. from Jajpur) where travellers and Government officers halt while proceeding to Jajpur. From this place there is a metalled road (not bridged throughout) *via* Keonjhar, Chaibasa (Singbhum), Chakradharpur and Ranchi for motoring to Patna, the capital of the Province of Bihar and Orissa (p. 62).

The Nalatigiri hills, with some Buddhistic caves and inscriptions in Pali are places of antiquarian interest. They are 10 m. from the Dhanmandal Ry. Station

¹ There is an excellent little handbook of Cuttack, Jajpur, Bhubaneswar, Udayagiri, Puri, and Kanarak, by Mr Brown, formerly Judge of Cuttack

(232 m. from Calcutta), half-way between Jajpur Road and Cuttack. Communication by fair weather road is cut off by two rivers. A P.W.D. Bungalow is available at 2 m. from the hills.

254 m. **Cuttack** * (R., D.B.) (pop. 51,007) is situated at the apex of the delta of the Mahanadi River, which rises in the Raipur district of the Central Provinces, and has a length of 529 m. It rushes down upon the delta through the narrow gorge of Naraj, 7 m. W. of the town of Cuttack, and, dividing into two streams, encircles the city on the N. and E., and on the W. by its branch, called the Katjuri. The river during the rains pours down a prodigious flood, and to prevent its sweeping away the city an important stone embankment has been erected on the spit of land on which that stands.

Cuttack is the headquarters of the **Orissa** Division.¹ It was founded in the 10th century A.D. by one of the Kings of the Kesari, or Lion, dynasty. Its position as the key of the Orissa hill territory and the centre of the network of the Orissa canals gives it both military and commercial importance. It is famed for its filigree work in gold and silver. It is the seat of the Circuit Court of the Patna High Court. There are two Clubs, one European and one Indian. The former is within the Fort enclosure and the latter at a short distance. Within the enclosure there is a Circuit House. The Ravenshaw College with imposing new buildings is affiliated to Patna University: there are also a Medical School and the Orissa School of Engineering. The Talchar coal-field is being developed by a ry. line from Kapilas Rd. Stn., 9 m. N. of Cuttack.

¹ See Sir W. W. Hunter's *Orissa* (1872.)

The **Fort**, called **Fort Barabati**, is in ruins, and all that remains of it now is a fine gateway. It was taken by the British in 1803. In the public gardens on the Taldanda Canal are a beautifully-carved arch and some other carved stones.

Near Cuttack are important weirs for regulating the flow of the rivers. Two of these, the Birupa and Mahanadi, may be seen in quitting the place. A road a little to the N. of the Taldanda Canal leads to the Jobra Ghat, where are the Great P.W.D. workshops and the Mahanadi Weir, which is 6400 ft. long and 12½ ft. high, and cost thirteen lakhs of rupees. It was begun in 1863 and completed in 1869-70. The Birupa River leaves the Mahanadi on its right bank, and the weir there is 1980 ft. long and 9 ft. high. Of the four canals which form the Orissa Irrigation System, two take off from the Birupa Weir, and one with its branch from the Mahanadi Weir.

Within 11 m. N. and S. of Cuttack the railway line is carried over no less than five big bridges, the whole section comprising the most difficult piece of riverain engineering to be seen anywhere in India.

Kendrapara, 38 m. to the E. of Cuttack town, connected by road and canal. A steam-launch plies between the two. A place of pilgrimage for Hindus where the idol Baldeb Jiu is much revered. It is visited by up-country pilgrims, being known as *Tulasi Khetra*. There are four D.Bs. on the way.

Banki. A place of some importance, situated at the outskirts of some of the Feudatory States at a distance of 28 m. to the W. of Cuttack. Two D.Bs. are on the way and a P.W.D. Bungalow is at Banki itself. It is an important centre of the Co-operative Credit movement in the Province. It is

possible to motor from Cuttack to Banki at most seasons of the year but the Khatjuri River has to be crossed.

272 m. from Calcutta is **Bhubaneswar**. There is a Dt. Bd. Bungalow at Bhubaneswar itself. The R.H. (supplies should be taken) is at Khandagiri, 6 m. to the N.W. of the station—permission to occupy it should be obtained from the Chairman, Dt. Bd., Puri, who will also accord leave to occupy a room in the Dt. Bd. Inspection Bungalow at Bhubaneswar if this is desired. One plan for sight-seeing is to proceed from the station to the Khandagiri R.H., spend a day in examining the Buddhist caves there, proceed early the second morning to the Asoka Rock at Dhauli, 5 m. S. of Bhubaneswar (1½ hr. walk) and return to the Bhubaneswar to visit the temples there and pass the heat of the day at the police station. It takes 3 to 4 hrs to walk round the temples in and about Bhubaneswar. A shorter method in dry weather is to hire a motor at Puri (p. 510) and visit the caves at Khandagiri and Udayagiri, and the temples at Bhubaneswar, in the same day, returning to Puri in the evening. The Jain caves are on the Khandagiri Hill at the back of it; the Buddhist caves are on a projecting spur to the front of it, and date from between 250 B.C. to 100 A.D.

The *Udayagiri Hill*¹ is 110 ft. high, and the caves are excavated in the sides of it at various levels. The first reached from the R.H. is the Swargapuri Cave, from which a level path to the right (E.) leads round to the Rani ka Naur and Ganesh Gumphas, and winds upward and backwards to below the Hathi Gumphas, where it is joined by

the path which runs up steeply to the left from the Swargapuri Cave past the Jaya Vijaya and Vairakuntha caves to this point. The Rani ka Naur, or Queen's Palace, faces E., and consists of two rows of cells, one above the other, shaded by pillared verandas, with a courtyard, 49 ft. by 43 ft., cut out of the hillside, and is probably intended to represent the side and two ends of a structural vihara. The upper storey, 63 ft. to the front, which stands back, has eight entrances giving access to four cells. At the N. end are two dwarf-pals, representing men in armour, with buskins and greaves, cut out of the solid rock in alto-relievo; these are probably figures of the Yavana warriors who conquered Orissa. At either end is a rock lion, executed with some spirit. The back wall of the veranda has an extensive series of tableaux, difficult to make out. First on the left are men carrying fruit, a group of elephants, and soldiers armed with swords—this is probably a scene from Ceylon. Then comes a scene, repeated at the Ganesh Gumphas, of a combat over a woman—and then one of the winged deer presenting itself to the King. The last scene which can be made out represents a love episode.

The lower storey also has eight entrances. The ground-floor front was formed of a colonnaded veranda 44 ft. long, having a raised seat, or berm, along its whole inner line. It was formerly supported by a row of eight square pillars, of which only the two end ones remain, and opened S. into an oblong chamber and N. into three rooms. Here also there is an extensive frieze, much dilapidated, so that only four fragments admit of description. The first represents a house, and a female figure looks out of each of the three doors, and one from the balcony, which is protected by a Buddhist rail. A similar rail runs in front of the lower storey, with a

¹ See pp. 55-94 of *The Cave Temples of India*, and Fergusson's *Indian Architecture*, 2, 9-18.

large tree by its side. In the second fragment a saint or priest holds a piece of cloth in his left hand and extends the right as in the act of blessing; one servant holds an umbrella, and another carries a sword. Next a devotee on his knees, and beyond two kneeling women bring offerings, one dusting the feet of a boy, who has one hand on her head. In the third fragment is a saddle-horse with three attendants, and the holy man with an umbrella held over him, and two attendants with swords. In the fourth fragment there is a group of six women, three carrying pitchers on their heads, and one kneeling and offering her pitcher to a figure, which is lost. On the right wing are scenes of a man and woman making offerings, and of a woman dancing to the accompaniment of four musicians.

The *Ganesh Gumpha* is almost due N. of the Rani ka Naur Cave, and much higher in the hill. It has only one storey, and consists of two compartments with a veranda in front. There are three pillars in the front of the veranda, square and massive, and two others have fallen. The pillars have brackets, with female figures carved on them. The flight of steps leading to the veranda has a crouching elephant on either side, each holding a lotus in his trunk. The veranda wall is ornamented with a series of eight tableaux in alto-relievo. This frieze and that in the Rani ka Naur Cave represent the same story, the main difference being that in this cave the figures are more classical and better drawn, and therefore, Fergusson thinks, more modern. In the Rani's Cave they are certainly more Hindu. The scenes include an escape on elephant back, dismounting from the elephant, and resting in the forest. The Buddhist trisula (trident) and shield are carved on this cave.

The *Swargapuri* has no carving or inscription except on some pilasters near the door, from the top of which runs a line of well-sculptured foliage with an elephant issuing from trees at the end of it.

The *Jaya Vijaya Cave*, a double-storeyed one, has a frieze with three compartments, the base being formed of a line of Buddhist rails. In the central compartment is a Bo-tree (p. 58). Beside the tree are two male figures, that on the left with folded hands, and that on the right holding a bit of cloth tied to the tree and a small branch. Near the men are two females bringing trays of offerings. The semicircular bands of scrollwork over the doorways are different, and beyond them are two turbaned figures carrying trays of offerings.

The *Vaikuntha* is a small two-storeyed cave, with the upper storey set back and a frieze of men and animals across the front. It was probably the prototype of the Rani ka Naur and Ganesh Gumpha.

75 yds. to the N.W. is the *Haihi Gumpha*, or "Elephant Cave," which Fergusson describes (2, 11) as an extensive natural cave, improved by art. It is perfectly plain, but has an inscription above it of 117 lines, which is referred to 300 B.C., and is probably the oldest memorial here. To the left is a boulder which has been hollowed out into a cell 5 ft. sq. A few yards N. of the "Elephant Cave" is the Pavana Gumpha, or "Cave of Purification"; and about 75 ft. to the S.W. of the Pavana Gumpha is the Sarpa Gumpha, or "Serpent Cave," having on the top of the entrance a rude carving of the hood of a three-headed cobra. Under this is the door, through which a man can just crawl; the interior is a cube of 4 ft. Beside the door is an inscription translated by James Prinsep.

50 ft. to the N. is the very inter-

esting *Bagh Gumptha*, or "Tiger Cave," cut externally into the shape of the upper part of a tiger's head, with the jaws at full gape. The eyes and nose of the monster are still well marked, but the teeth are now imperfectly discernible. The head at top, where it joins the hill, is 8 ft. 8 in. broad. The gape is 9 ft. wide, and the entrance to the cell occupies the place of the gullet. To the right of the entrance is an inscription in the Asoka character. At the beginning of the inscription is a Buddhist monogram, and at the end a Swastika cross.

The *Khandagiri Hill* is 133 ft. high and faces E. It is thickly covered with trees. The path which leads to the top is steep, and at the height of about 50 ft. divides into two, one branch leading to the left, and to a range of Jain caves cut in the E. face of the hill (see below).

The path on the right leads to the *Ananta Cave*, which is a narrow Buddhist excavation, with four doorways and a veranda with pillars and pilasters with decorated sides. Instead of a capital, these have a projecting bracket, shaped like a woman. The architrave is heavy, and over it is a parapet supported on corbels. In the centre of the back wall of the cave is a Buddha in bas-relief. The frieze is in five compartments, and represents figures running with trays of offerings, athletes fighting with bulls and lions, and two lines of geese running with spread wings, each with a flower in its bill. In the semicircular space under one of the arches is a nude female standing in a lotus-bush, and holding a lotus-stalk in either hand. Two elephants are throwing water over her with their trunks. This is a representation of Lakshmi, the first of the Hindu Pantheon to be revered by the Buddhists. In the other tympanum is a scene representing the worship of a Bo-tree.

The left path leads to a modern gallery, and to the S. to a range of three openings. There is here a Sanskrit inscription of the 12th century recording that the cave belonged to Acharya Kalachandra and his pupil Vellachandra. Next comes a range of caves facing the E., divided into two compartments by a partition in the middle. On the back wall is a row of seated Dhyani Buddhas and some new images of Jaina Deva. At the E. end is an altar of masonry, on which are ranged a number of Jain images. The second compartment is very similar. On the back wall is a row of Dhyani Buddhas 1 ft. high, and below, females seated on stools, some four-handed, others eight-handed, with one leg crossed and the other hanging. Under all are lions *couchant*.

From this to the top of the hill is a stiff climb, and the steps in one place are very steep. On the summit of the hill is a plateau and an 18th-century temple to Parasnath. From it is a magnificent panoramic view 15 m. all round. The groves of mango and jack trees are most beautiful. In front of the temple is a fine terrace, 50 ft. sq., with a raised masonry seat all round. To the S.W. of the temple is a smooth terrace of 150 ft. diameter, gently sloping to the W., called the Deva Sabha. In the centre is a small square pillar, with a bas-relief of Buddha on each side, and round it four circles of chaityas. Three small boulders, set in a triangle and covered by a dolmen of sandstone, stand in the inner circle. E. of the Deva Sabha, at 100 yds., is a tank cut in the solid rock, called the Akasha Ganga, or "Heavenly Ganges." Immediately below the tank is a cave where the remains of Rajah Lelat Indra Kesari are said to rest. These caves probably were originally Buddhist, and were afterwards converted by the Jains.

Bhubaneswar.—The first mention of Bhubaneswar, in the Records of the Temple of Jagannath, dates from the reign of Yayati, 474-526 A.D., the first of the Kesaris, or Lion dynasty of Orissa. He expelled the Yavanas, thought by Stirling and Hunter to be the Buddhists who ruled Orissa for 150 years after a successful invasion about 300 A.D. His successors reigned in Bhubaneswar until Nripati Kesari, in 940-50 A.D., founded Cuttack and made it his capital.

7000 shrines once encircled the sacred lake; now but 500 remain in various stages of decay, exhibiting every phase of Orissan art "from the rough conceptions of the 6th century, through the exquisite designs and ungrudging artistic toil of the 12th, to the hurried dishonest stucco imitations of the present day." It is easy to perceive that there are two styles of architecture which run side by side with one another. The first is represented by the temples of Parashuramesvara and Muktesvara, the second by the Great Temple. They are not antagonistic but sister styles, and seem to have had different origins. "We can find affinities with the first two, but I know of nothing like the Great Temple anywhere else."

"The Great Temple¹ is," says Fergusson, "perhaps the finest example of a purely Hindu temple in India." None but Hindus may enter the enclosure, the high walls of which are 7 ft. thick and of large cut stones without mortar. From the top, however, of a platform outside the N. wall a view of the interior may be obtained. Besides the Great Temples and the halls of approach to it there are also many smaller temples in the enclosure, of which a plain one, 20 ft. high,

is the oldest; at the N.E. corner is a pavilion, perhaps built for a music hall, but now containing an image of Parvati.

The Great Temple was built by Lelat Indra Kesari (617-57), and consisted originally of only a vimana and porch; the beautiful Nath and Bhog mandirs now in front of it were added between 1090 and 1104. The presiding deity is Tribhubanesvara, "Lord of the Three Worlds," generally called Bhubaneswar. He is represented in the sanctuary by a block of granite 8 ft. in diameter, and rising 8 in. above the floor, which is bathed with water, milk, and *bhang*. A closer view reveals three differently shaded portions, representing respectively Brahma, Vishnu, and Maheswar. There are twenty-two *dhupas*, or ceremonies, daily, consisting in washing the teeth of the divinity, moving a lamp in front, dressing, feeding, etc.

"The Great Tower can be seen from outside the wall. It is 180 ft. high, and, though not so large, is decidedly finer in design than that at Tanjore. Every inch of the surface is covered with carving of the most elaborate kind; not only the divisions of the courses, the roll mouldings on the angles, or the breaks on the face of the tower but every individual stone in the tower has a pattern carved upon it." Especially in the perpendicular parts seen from over the wall, "the sculpture is of a very high order and great beauty of design." The top of the spire is flat, and from the centre rises a cylindrical neck, supporting a ribbed dome over which is placed the Kalasha or "pinnacle." Twelve statues of lions seated support the dome, and over all is a broken trident. The shrine itself is called the Bara Dewal, and the original hall of approach to it, the Jagmohan. In front of the latter now is the Bhog Mandir

¹ *Indian Architecture*, 2, 99, where a plan and illustration of the Great Temple will be found.

or "Hall of Offerings," and E. of that the Nath Mandir, or "Dancing Hall." It is elegant, of course, but differs from the style of the porch, in that "all that power of expression is gone which enabled the early architects to make small things look gigantic from the mere exuberance of labour bestowed on them" (Fergusson, *Ind. Arch.*, 2, 103).

Outside the enclosure are many small subterranean temples. The jungle to the S. of the Great Tower, to the extent of 20 acres, is said to be the site of Lelat Indra Kesari's Palace, and exhibits everywhere the remains of foundations and pavements. N. of the temple is the very fine tank called *Vindusagar*, "Ocean Drop," which is said to be filled with water from every sacred stream and tank in India and possesses in consequence, to a superlative degree, the power to wash away sin. In the centre is a Jal Mandir, or "Water Pavilion," consisting of several shrines, on which perch numerous cranes in motionless repose. Here the god is brought to bathe on a certain day in the year. In front of the central ghat of this tank there is a magnificent temple, with a porch, a more modern dancing-hall, and Bhog Mandir. All but the Bhog Mandir are lined with brick-red sandstone, elaborately sculptured. The temple is sacred to *Vasudev*, or *Krishna*, and *Ananta*, or *Balaram*, and no pilgrim is allowed to perform any religious ceremony in the town or to visit Bhubaneswar without paying for permission here. Along the E. side of the tank will be noticed several temples of the same shape as the Great Temple. About $\frac{1}{4}$ m. to the E.N.E. of the Ananta and Vasudev Temple is one, about 40 ft. high, of *Kotirithesvara*, "The lord of ten millions of sacred pools." It is evidently built of stones from some other edifice. $\frac{1}{4}$ m. to the E. of this is the *Temple of Brahmesvara*, on a high mound, formed into a

terrace. It is most sumptuously carved, inside as well as out, and was erected at the end of the 9th century A.D. Close to its terrace on the W. side is a tank called *Brahma Kunda*. N.E. is an old ruined temple of basalt, to *Bhaskaresvara*, "Sun-god," and said to belong to the close of the 5th or the beginning of the 6th century.

At the N.E. corner of the Great Temple is a very handsome tank surrounded by a row of 108 small temples, and $\frac{1}{4}$ m. E. of this, beyond the Muktesvara and Parashuramesvara temples, is the once magnificent Temple of *Raj Rani*. Fergusson (*Ind. Arch.*, 2, 103) says of it: "The plan is arranged so as to give great variety and play of light and shade, and, as the details are of the most exquisite beauty, it is one of the gems of Orissan Art." It faces the E., and has a porch in front, both of dressed brick-red sandstone. The niches are filled with statues 3 ft. high, executed with great vigour and elegance. One pillar has three kneeling elephants and lions, with a Nagni or female Naga with her seven-headed snake hood. Over the doorways are represented the Navagraha, or "nine planets."

About 300 yds. to the W. of the *Raj Rani* is a grove of mango-trees, called *Siddharanya*, "Grove of the perfect beings." Here many temples were built, of which more than twenty remain entire. Of these the most remarkable are *Muktesvara*, *Kedaresvara*, *Siddhesvara*, and *Parashuramesvara*.

Muktesvara is the handsomest, though the smallest. It is 35 ft. high, and the porch 25 ft. high. The floral bands are better executed than in most of the temples; the bas-reliefs are sharp and impressive; the statuettes vigorous and full of action, with drapery well disposed; and the disposition of the whole is elegant and most

effective. Among the subjects are a lady mounted on a rearing elephant and attacking an armed giant; a figure of Annapurna presenting alms to Siva; females, half-serpents, canopied under five or seven-headed cobras; lions mounted on elephants or fighting with lions; damsels dancing or playing on the *mridang*; an emaciated hermit giving lessons. The scroll-work, bosses, and friezes are worthy of note. The chamber of the temple is 7 ft. sq., but outside measures 18 ft. In front of the porch is a Toran 15 ft. high. It is supported on two columns of elaborate workmanship, unlike anything of the kind at Bhubaneswar. Over it are two reclining female figures. It is said that it is used for swinging in the Dol Festival.

Kedaresvara.—Close by a tank behind this temple is the Kedaresvara Temple, and near it, against the outer wall of a small room, is a figure of Hanuman, the monkey-god, 8 ft. high, and one of Durga standing on a lion. Her statue is of chlorite, and has the finest female head to be seen in Bhubaneswar. The Kedaresvara Temple is 41 ft. high, and has an almost circular ground plan; it is probably older than the Great Temple, and possibly dates from the middle of the 6th century.

N.W. of Muktesvara is **Siddhesvara**, which is very ancient, and was once the most sacred spot on this side of Bhubaneswar. It is 47 ft. high, and has a well-proportioned porch.

The **Parashuramesvara**, 200 yds. to the W. of the *Muktesvara*, is considered by Fergusson (*Ind. Arch.*, 2, 97) the oldest temple at Bhubaneswar. "The sculptures are cut with a delicacy seldom surpassed." The ground plan is a square, the porch is oblong and covered with bas-reliefs represent-

ing processions of horses and elephants in the upper linear bands under the cornice, and scenes from the life of Rama in the lower. The roof is a sloping terrace, in the middle of which is a clerestory with a sloping roof, flat in the middle. As the roof stones project beyond the openings, neither direct rays of sun nor rain can penetrate.

The famous **Dhauli** or **Aswatama** rock, on which is inscribed the best-preserved set of edicts of King Asoka, lies between 4 m. and 5 m. S.E. of Bhubaneswar. The rock, unlike that of *Shahbazgarhi* near Hoti Mardan (p. 383, Route 17), is an isolated one on the level of the plain in front of a low ridge; the face inscribed is 15 ft. by 10 ft., and above it are the remains of an elephant. The clearness of the inscription, which has been exposed to the sun and storms of twenty-two centuries, is wonderful.

283 m. **Khurda Road**, branch line to (28 m.) **Puri**. The great temple of Jagannath is seen soaring skywards long before Puri is reached. On the N. side of the line, some miles W. of Puri, may be seen an old Orissan bridge.

311 m. from Calcutta **PURI** ★ The railway station is $1\frac{1}{2}$ m. to the N. of the town, and the Civil Station runs along the seashore. Steamers occasionally call at Puri, but there is no shelter for them and no landing-place. There are three Hotels; the B.N. Railway Hotel can be recommended. The *Church* is about 80 yds. from the Collector's office. There are several villas on the seaside. Excellent bathing can be had.

The town of Puri is about $1\frac{1}{2}$ m. in breadth from E. to W., and $3\frac{1}{2}$ m. long from N. to S. It is of great antiquity, and was probably the Dantapura where the sacred relic of Buddha's tooth was preserved until it was finally transferred to Ceylon. The population is 38,694; but during the great festivals this

number is increased by 100,000 pilgrims. The town covers an area of 1871 acres, including the *Kshetra*,¹ or "sacred precincts." It is a city of lodging-houses, and the streets are mean and narrow, except the *Baradand*, or road for the Car of Jagannath, when he goes from his temple to his country-house. This road runs through the centre of the town N. and S., and is in places half a furlong wide.

The **Temple**, or Sri Mandir, is in the centre of the town and stands upon rising ground known as Nilgiri or "the Blue Hill." The endowments provide a total annual income of Rs.100,000, and the offerings of pilgrims amount to Rs.75,000 a-year, as no one comes empty-handed. The richer pilgrims give offerings of gold, silver and jewels at the feet of the god. It may be remembered that when dying Maharaja Ranjit Singh of the Panjab bequeathed the Koh-i-Nur to Jagannath, but his successor did not give effect to his bequest. There are more than 6000 male adults as priests, warders of the temple, and pilgrim guides, and, including the monastic establishments and the guides who roam through India to escort pilgrims, there are probably not less than 20,000 men, women, and children dependent on Jagannath. The immediate attendants on the god are divided into thirty-six orders and ninety-seven classes. At the head of all is the Raja of Khurda, who represents the royal house of Orissa. There are distinct sets of servants to put the god to bed, to dress and bathe him, and a numerous band of nautch girls who sing before him.

The title **Jagannath** (Juggurnath) (Sanskrit="Lord of the

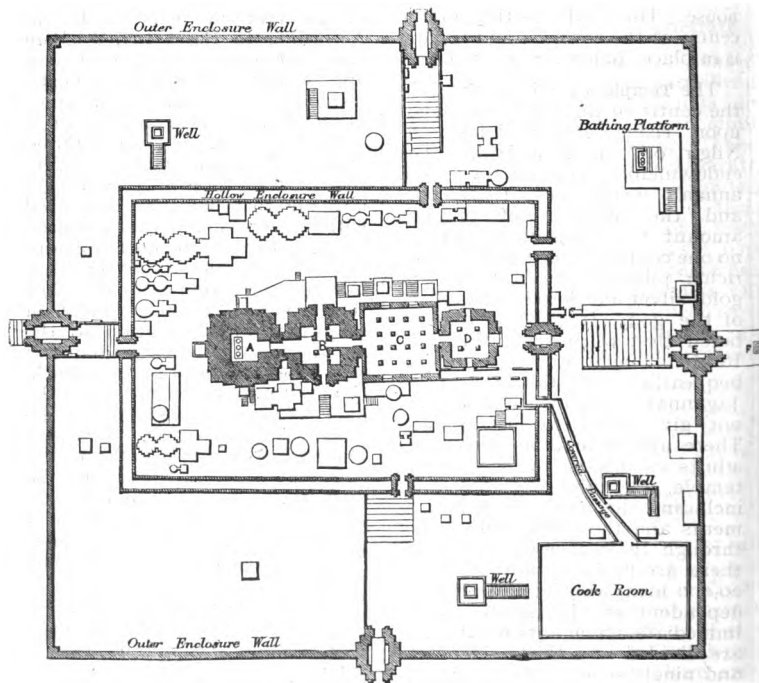
Universe") is really a name of Krishna, worshipped as Vishnu; the immense popularity of the shrine is due to the doctrine preached that before the god all castes are equal. There are, strictly speaking, three images in the temple: representing Jagannath himself, his brother Balbhadr and his sister Subhadra. According to Babu Brij Kishore Ghose's *History of Puri*, the images are "bulky hideous wooden busts, fashioned in a curious resemblance of the human head, resting on a sort of pedestal. They are painted white, black and yellow respectively; their faces are exceedingly large and their bodies are decorated with a dress of different coloured cloth." Jagannath and Balbhadr have "arms projecting horizontally forward from the ears," but the sister is "entirely devoid of even that approximation to the human form." A large diamond glitters on the head of Jagannath. Quaint representations of the images in a wooden shrine may be bought in the bazar. *Bhog*, or *Prasad* is offered several times a day and afterwards sold to the pilgrims. The three images are annually dragged in procession at the *Rathjatra*, which commemorates the journey of Sri Krishna from Gokul to Mathura (p. 260), and takes place in June or July. The car (*rath*) of Jagannath is 45 ft. high and 35 ft. square, and is supported on sixteen wheels of 7 ft. diameter; those of the brother and sister are smaller.¹ As crowds of fanatic pilgrims rush forward to draw the cars, fatal accidents occur occasionally. In some instances votaries were known to throw themselves beneath the advancing wheels; but the number of such cases of self-immolation has been greatly ex-

¹ The whole country round is divided into kshetras, the Parvati round Jajpur, the Hara round Kanarak, the Padma (or lotus) round Bhubaneswar, and the Parushotama round Puri. See the very interesting account of Orissa in the *Imperial Gazetteer*.

¹ The Tooth Festival of Buddha in Japan and Ceylon is also celebrated with three cars. Hence the theory that the Puri images were originally Buddhist symbols diverted to Brahmanical worship.

aggregated, although mentioned by many travellers. The annual mortality of the pilgrims used, however, to amount to many thousands, and a spread of cholera constantly followed their dispersion from Puri. Of late years much has been successfully done

than a hundred, thirteen of them being sacred to Siva and one to the Sun. It is, of course, strictly closed to all non-Hindus, but the tower and front and the scene at the entrance can be comfortably viewed from the roof of a lodging-house on the opposite side of the



Scale 200 f^t to the Inch

Plan of Temple of Jagannath. (Fergusson, *Ind. Arch.*, 2, 108.)

to improve the sanitation and water-supply of the place.

The sacred enclosure is nearly a square, 652 ft. long and 630 ft. broad, within a stone wall about 20 ft. high, with a gateway in the centre of each side. As the door stands open, it is possible to see the bands of pilgrims within, but not the temples, of which, besides the Great Pagoda, there are more

street—fee to servants of the house. In front of the E. gate is an exquisite *Pillar* brought from the Black Pagoda at Kanarak. It stands on a platform of rough stones, and, reckoning to the top of the seated figure of the Garuda, or "eagle," which surmounts it, is 35 ft. high. The Lion Gate (E.), on entering which the pilgrims are slightly struck with a wand by an

official, has its name from two large lions of the conventional form, with one paw raised, which stand one at either side of the entrance. Within is a second enclosure surrounded by a double wall, having an interval of 11 ft. between the walls, and within this again is the temple proper. The "Hall of Offerings," or *Bhog Mandir* (D.),¹ is said to have been built by the Mahrattas in the last century at a cost of 40 lakhs of rupees. It was part of the Black Pagoda of Kanarak, and was brought thence by them. The *Nat Mandir* (C), or "dancing-hall," also of late date, is a square hall measuring 69 ft. by 67 ft. inside. The walls are plain, with only two figures of dwarf-pals, called Jaya and Vijaya, and a marble figure of Garuda 2 ft. high.

The *Jagmohan* (B), or "Hall of Audience," where the pilgrims see the images, is 80 ft. sq. and 120 ft. high. The *Baradewal* (A), or "Sanctuary," where the images are, is also 80 ft. sq., and is surmounted by a lofty conical "tower" or vimana 192 ft. high, black with time and surmounted by the Wheel and Flag of Vishnu.

The date of the erection of the temple is 1174 to 1198, and it cost about half a million sterling. The temple was thoroughly repaired in 1922-23. The building of 1198 was a reconstruction by Raja Anang Bhim Deo, in expiation of the offence of having killed a Brahman. The image of Jagannath is said to have appeared about 318 A.D.

There is a street about 45 ft. broad all round the temple enclosure. Turning to the left from the Lion Gate along this road, the visitor comes to the S. gate, where steps lead up to the entrance. The entrance itself is 15 ft. high, and is ornamented with many figures. Above are depicted scenes from the life of

Krishna. The supports of the massive roof are of iron.

Rather more than a mile to the N. of the temple, and approached by the broad Baradand—a picturesque grassy route in the cold weather—is the famous Garden House, to which the Car of Jagannath is brought at the Car Festival in June or July, and where it stays for eight days during the festival, until it is drawn back to the temple. The great Car is dragged by 4200 professionals, who come from the neighbouring districts, and during the festival live at Puri gratis. It is broken up at intervals, when the timbers are made into sacred relics, and another is made of exactly the same pattern. The images are also treated in this way. The house is a temple within a garden enclosed with a wall 15 ft. high. The principal gateway faces the temple, and has a pointed roof, adorned with conventional lions. The gates to this temple are built upon the Hindu arch system, with a series of slabs supporting the roof, each a little longer than the other, and projecting beyond it. The temple is said to be very old, but it has not much pretension to architectural beauty exteriorly; the interior, however, which strangers are permitted to enter, is interesting as giving one an idea of the arrangement of the Great Temple. In one of the pillared halls kneels a Garuda on a column facing the shrine. On the side of the temple there is a plain raised seat 4 ft. high and 19 ft. long, made of chlorite, and this is called the Ratna Bedi, the throne on which the images are placed when brought to the temple. On the walls are some fine carvings of horsemen, etc. Outside, over the door, are various figures of women, 2 ft. high, supporting the roof; also carvings of Brahma with four heads, worshipping Narayan; of Krishna playing to the Gopis, etc.

¹ These letters refer to corresponding letters on the plan (p. 512).

The legend is that King Indradymna, King of Malwa, pitched his camp here when he discovered Puri, and set up an image of Narasingh. Here the Sacred Log from the White Island stranded, and here the Divine Carver made the images of Jagannath, etc., and here Indradymna performed the horse sacrifice a hundred times over.

1 m. S.W., on the sea-shore S. of the Circuit House, is the *Swarga Dwara*, or "Door of Paradise," where, when all the ceremonies are finished, the pilgrims bathe in the surf and wash away their sins. There is a stump of a pillar 4 ft. high on the right hand, near a small temple. On this pillar offerings are placed, which are eaten by the crows. On the left is the Lahore Math or Monastery. Within the enclosure is a well with excellent fresh water. Hundreds of men and women will be seen bathing, the surf rolling over them in its fury. Afterwards they make heaps of sand and stick pieces of wood into them.

N.W. of the city are the Chandan Tank and Temple, the Mitiani River, the Markhand Tank and Temple and a *Bridge* built, according to Raja Rajendra Lal Mitra, in 1038-50. It is 278 ft. long by 38 ft. broad, and has nineteen arches.¹

20 m. N.E. from Puri is **Kanarak** (P.W.D. Inspn. Bungalow: supplies to be taken), celebrated for its **Black Pagoda** (c. 1250-60), which every one should visit in spite of the discomforts of a night journey through heavy sand in a palanquin. (Cost about Rs.25). A relay of bearers should be sent on half-way; provisions and drinking-water must be taken. It is best to leave Puri at 10 P.M.; arrive at Kanarak at 4.30 A.M.; leave again at noon; and arrive at Puri at 6 P.M.

Recent excavations at Kanarak

¹ See *Puri and its Environs*, by Robert Dunbar.

have led to a much higher appreciation of the great temple, which is figured in Fergusson's *Indian Architecture* (I, 323). Sir John Marshall, D.G. of Archaeology, has recorded that there is no monument of Hinduism that is at once so stupendous and so perfectly proportioned as the Black Pagoda. Stirling fixes the date of the Black Pagoda in the year 1241; it may have been as early as the 9th century A.D. The spire was never completed. When Fergusson visited Kanarak in 1837 a portion of the Great Tower was still standing.

The shrine at the W. end of the temple has been cleared of the mass of superincumbent ruins, and it is now possible to realise the splendid carvings on it, including the grand wheels and horses, which indicate the fact that the temple was the chariot of the Sun-god, to whom it was dedicated. There is a number of very fine carved figures of green chlorite on the walls, but, unhappily, much of the decoration is of a licentious character; inside is a beautifully-carved throne, on which the idol once stood. In front of the ruined shrine is the Jagmohan porch, which stands complete. It has a square base of 90 ft., and is built of red sandstone and laterite. The pagoda is called *black* in contrast to the white-washed pagoda at Puri. The roof is beautiful, and covered with elaborate carvings free from all objectional features. Fergusson says of it that there is no roof in India where the same play of light and shade is obtained, with an equal amount of richness and constructive propriety. "Internally the chamber is singularly plain, but presents some constructive peculiarities worthy of attention. On the floor it is about 40 ft. square, and the walls rise plain to about the same height. Here it begins to bracket inwards, till it contracts

to about 20 ft., where it was ceiled with a flat stone roof, supported by wrought-iron beams . . . showing a knowledge of the properties and strength of the material that would be remarkable were it not that they seem to be formed of blocks of short lengths, 3 in. or 4 in. square, built together, like bricks, and then covered with molten metal [*sic*, heated and welded into one long beam]. The employment of these beams here is a mystery. They were not wanted for strength, as the building is still firm after they have fallen, and so expensive a false ceiling was not wanted architecturally to roof so plain a chamber. It seems to be only another instance of that profusion of labour which the Hindus loved to lavish on the temples of their gods" (*Ind. Arch.*, 2, 107). The entrance of the Jagmohan is on the E. side, guarded by two stone lions, with strongly-marked manes and one paw lifted up, resting on the backs of elephants, which are smaller in size. The height of the entrance, built of chlorite, is 16½ ft.; the roof was supported by two rafters of iron and four of stone. Near the temple lie several massive iron bars, varying from 7 ft. to 36 ft. in length.¹ The interior of the hall has now been completely filled up in order to save the outer walls. As the E. door is guarded by lions, the N. door is by elephants, and the S. by horses trampling down men, who from their tusk-like teeth, crisped hair, knives, and shields, are intended for aborigines. The spirit with which the horses are carved, and also the device on one of the shields of two climbing lizards, should be noticed.

¹ Other instances of the employment of large masses of iron occur at Dhar (p. 149) and at the Kutb Minar of Delhi (p. 317). These iron beams have probably something to do with the fable that there was once a lodestone in the tower of the temple, which used to draw passing ships on to the shore.

To the S. of the Jagmohan is a very large banyan-tree, under which is a good place for the traveller to take his meal; and near the great tree is a grove of palms and smaller trees, and a garden with a *math*, or devotee's residence. Over the E. entrance used to be a chlorite slab, on which the emblems of the days of the week, with the ascending and descending nodes, were carved. Some English antiquaries attempted to remove this for the Museum at Calcutta, but, after dragging it 200 yds., gave up the attempt, though the Indian builders, after excavating the block in the hills and carving it, had carried it 80 m. across swamps and unbridged rivers to Kanarak. The back portion lies now about 200 yds. to the E. of the temple, and is 20 ft. 2 in. long, 4 ft. deep, and 4 ft. 10 in. broad. It is sadly disfigured with oil and red paint, with which the Hindus have bedaubed it. The front part with all the carving was cut off, and is now in the museum in the temple enclosure.

The sea, about 2 m. off, is only visible from the *débris* of the temple. Black buck are to be found between Puri and Kanarak.

327 m. from Calcutta is Balugan. From here the railway line skirts the fine Chilka Lake, some of the scenery along which is of great beauty—in the background being the jungle-clad hills of the Eastern Ghats, while the lake itself is dotted with islands on which, as on the mainland, game of all kinds abounds, and in the cold season has a surface crowded with wild-fowl. The lake is 45 m. long, averages 10 m. in width, is separated by a narrow stretch of sand from the sea, and is shallow, seldom exceeding 6 ft. in depth; the water is brackish, and there is a very slight tide at the Southern end, the sea running into it at Manikpatnam. Trade is

carried on in flat-bottomed boats of peculiar structure with lateen sails of bambóo-matting. There is a P.W.D. Inspection Bungalow at Barkul, picturesquely situated on the Western shore of the lake. Permission may be obtained for occupation of the house from the Superintending Engineer, Cuttack. This bungalow is connected by a good road, about 3 m. long, with Balugan railway station.

345 m. **Rambha**, picturesquely situated at the S. of the Chilka Lake. The large house on the margin of the lake was built by Mr Snodgrass¹ in 1792—it is believed from famine funds. It is now the property of the Raja of Kalikota.

356 m. **Ganjam** station for old Ganjam, situated on the Rushkuliya, and formerly chief port and town of the District; in the early part of the century it was ravaged by an epidemic of fever and abandoned in consequence. The fort, which was commenced in 1768 by Mr Cotsford, the first Resident in Ganjam, still forms an interesting ruin, and recalls memories of former Residents and Chiefs in Council, who were engaged here partly in political and partly in commercial enterprises for the East India Company. Alexander Mackrabie, the brother-in-law and private secretary of Sir Philip Francis, who was present as Sheriff of Calcutta at the execution of Maharaja Nuncomar in 1775, died here in the following year, while on a sea voyage for his health. The tomb has disappeared.

361 m. **Chatrapur** station, beautifully situated on high ground above the sea, headquarters of the District Magistrate and Collector. D.B. at railway station, furnished; small golf-course.

¹ This was the gentleman who extorted a pension from the E.I.C. by sweeping a crossing in front of the India House.

375 m. **Berhampur** (Ganjam). Berhampur station (R., D.B.) chief town of the Ganjam District, headquarters of the District Judge: an old Cantonment, the troops were removed by Lord Kitchener in 1906. Motors can be hired. Chief buildings are the Jubilee Hospital, Town Hall, Kalikot College. It is noted for its tussock silk cloths and gold-embroidered turbans. **Gopalpur** (hotels), the seaport of the District, is 9 m. by road. A motor-bus service runs from Berhampur to Aska (25 m.), where there is a sugar-factory, and to Russelkonda (50 m.); fare, Rs. 5.

Russelkonda (Russell's Hill) is the hqtrs. of the Maliah tracts, inhabited by Khonds, a primitive race which once practised human sacrifice. Between 1837 and 1854 more than 1500 of these "Meriahs" were rescued by British officers.

Mahendragiri, the highest point of the Eastern Ghats, in the Ganjam District, has on its top five unique structures built of massive stone. One of these is dedicated to the god Siva. There is also a stone pillar on which are engraved the figure of a tiger, two fish, and an inscription. The Cholas of Tanjore, whose crest was the tiger, once extended their sway right up to Mahendragiri, and even beyond. The figure on the pillar still bears testimony to it. There is a private bungalow at the summit of the mountain, belonging to the Raja of Mandasa.

437 m. **Naupada** junction, branch line to (25 m.) Parlakimedi.

466 m. **Chicacole Road** station. There is a motor-bus service from the station to **Chicacole** (8 m. by road), a large town (D.B. unfurnished) which contains a noble mosque built in 1641 by Sher Muhammad Khan, the first Muhammadan Faujdar of the Chicacole Sirkar. It was formerly

celebrated for its very fine muslins. Near is the port of Kalingapatam, a former centre of the Kalinga dynasty, now a pleasant seaside resort.

509 m. **Vizianagram (R.)**, the headquarters of one of the most extensive Zemindari estates in India, and once included in the Kalinga kingdom. The town (pop. 39,299), founded in 1712, adjoins the disused Cantonment. The fort (1 m. distant) is almost entirely occupied by the *Palace Buildings*, etc., of the Raja. The place, which is 16 m. from the sea at Bimlipatam, is important commercially. Half-way between the fort and the ry. station is a large tank with a constant supply of water. The *Market* was built to commemorate the visit of King Edward, when Prince of Wales, to India in 1875. It was a Vizianagram force which, with French assistance, attacked Bobbili (*pedda puli*, the great tiger) in January 1757), when, after putting the women to death, Raja Ranga Rao of Bobbili fell sword in hand in accordance with the old Rajput tradition. Not long after four of his old retainers murdered the Raja of Vizianagram. The tragedy is commemorated by an obelisk at Bobbili, which was erected in 1891 by the late Maharaja of Bobbili.

A branch (B.N. Ry.) runs N. to Bobbili and Parvatipuram (48 m.); it is proposed to continue this eventually to Raipur on the B.N. Ry.

From Vizianagram the Buddhist remains at *Ramatirtham*, recently excavated by the Archaeological Department, might be visited. There is a good road up to the foot of the hill; but arrangements must be made for crossing the river. (The Tahsildar should be consulted.)

547 m. **Waltair junction station**; short branch to Vizagapatam and Waltair. From Waltair Jn. may

be visited *Simhachalam*, with a temple on the hill, which is a very fine specimen of the Orissa style. The village is about 3 m. from Simhachalam ry. station; about 10 m. from Waltair. The Raja of Vizianagram is the owner of the temple and of the village. There are fine gardens on both sides of the walk up the hill, which rises by gentle gradation. The temple bears inscriptions on almost all the pillars and walls. These date from the 12th century A.D. As the place is malarious, a halt is not advisable. The great Vijayanagar King *Krishnaraya*, who was ruling Southern India in the beginning of the 16th century A.D. from his capital at Hampi, near Bellary, is said to have conquered the Kalinga country and to have set up a *pillar of victory* at, or near, Simhachalam. This pillar has not been traced.

2 m. **Vizagapatam**. * **Vizagapatam**, the chief town (population 44,711) of the district of that name, is a growing seaport, situated on a small estuary. The natural *harbour* at Vizagapatam, which is formed by two almost parallel ridges jutting into the sea, is the only protected harbour on the Coromandel coast. But it is spoiled by a bar of sand across the mouth of the creek; and vessels of deep draught are at present obliged to anchor off-shore. Extensive and important operations have been undertaken by the Bengal-Nagpur Ry. Company for the removal of the bar, and wharves and warehouses are being erected. The harbour works, as planned, will provide for an entrance, 400 ft. wide, from the sea. The sand is being used for the reclamation of the adjoining swamp area. Some 9000 acres have been acquired by the Ry. Company, and a site specially situated to it will be allotted to each industry. It is in connection with this new harbour that the branch

line to Raipur is being taken in hand (p. 517). The port was declared a "major port" in March 1925. Colonel Forde landed here in 1759, and drove the French from the Northern Circars. Most of the European residents live in the suburb of Waltair to the N. of the town, which stands on elevated ground composed of red laterite rocks.

Waltair, "the Indian Brighton," has hotels; and enjoys a certain reputation as a sanatorium for tuberculosis. The manufacture of *panjam* cloth and ornamental articles of ivory, buffalo-horn, and silver filigree work, are specialties of the district. In the district are sources of manganese, of which large quantities are exported yearly.

18 m. N.E. of **Vizagapatam** is **Bimlipatam** (population 7495), a port, where coasting steamers touch. There are several 17th century tombs in the Dutch cemetery.

568 m. **Anakapalli**: at a distance of about 2 m. from here there are interesting Buddhist remains, preserved as ancient monuments.

640 m. **Samalkot** station junction for (8 m.) **Cocanada Town** (Kakinada—"Crow Country") and (10 m.) **Cocanada Port**, connected with the Godavari River by navigable canals. Cocanada (pop. 53,348) has a R.H. belonging to the Municipality. It is the principal port, after Madras, on the Coromandel coast. Ships lie in safety in the Roads (Coringa Bay), which, though shallow, are protected to the S. by a sandy promontory at the mouths of the Godavari. The jetties, wharves, and business houses are on the banks of a canal leading into the Roads.

672 m. **Rajamundry** (Rajamahendri) (R.) (pop. 53,791) is the old seat of the Orissa Kings in

the S. and of the Vengi Kings, and is regarded by the Telugus as their chief town. It contains a large jail, a museum, public gardens, and a provincial college. Historically it is chiefly interesting as the headquarters of Bussy from 1754-7, during which he held possession of the Northern Circars assigned to him by the Nizam. The Gorge, about 50 m. to the N.W., where the Godavari issues from the hills, should certainly be seen, as it forms one of the most beautiful pieces of scenery in Southern India—a succession of Highland lochs in an Eastern setting. A few miles down the river from Rajamundry are the head-works of the magnificent Godavari Delta Irrigation system, first designed by Sir Arthur Cotton; the *anicut*, or dam, is a huge piece of masonry, 4 m. in length from bank to bank, and is well worth a visit. In the middle of it is a pretty, well-wooded island.

674 m. **Godavari**. A splendid railway bridge of 56 spans of 150 ft. crosses the river here. This and the Kisma (Krishna) Bridge are among the finest engineering works in all India.

727 m. **Ellore** station (R.). Formerly capital of the Northern Circars; now famous only for its carpets. The Godavari and Kistna Canal systems join here.

764 m. **BEZWADA** junction (R., D.B.), terminus of the Nizam's State Railway from Wadi, Hyderabad, and Warangal (Route 28). A short line (19 m.) runs to Guntur (p. 591) where connection is made with the metre-gauge line to Dronachellam and (260 m.) Guntakal Junction (Route 30). **Bez-wada** (pop. 44,159) is an important trading-place on the most frequented crossing of the Kistna River. A fort was erected here in 1760, but has since been dis-

mantled. In making excavations for canals many remains were exposed, which show that the place was, in the Buddhist period, a considerable religious centre; and as such it was visited by Hiuen Tsang in 637 A.D. It is shut in on the W. by a granite ridge 600 ft. high, running N. and S., and ending in a scarp at the river. At right angles to this ridge, and $\frac{1}{2}$ m. from the stream, is a similar ridge sheltering the town on the N. Close to the E. end of N. ridge is a sharp-pointed detached mass of gneiss, on which are Buddhistic caves and cells. On the S. side of the river, opposite to Bezwada, is a hill similar to the W. ridge, of which it is a continuation. It is 450 ft. high, and from Bezwada seems a perfect cone. On the S. side of the river, 1 m. to the W., is the Undavalli Cave-Temple (see below).

In the town are some old shrines with inscriptions from the 7th century downwards. The caves of Bezwada—unimportant—are hollowed out of the E. side of the great hill at the foot of which the town stands. At the Museum there is a colossal figure of Buddha in black granite, which came from the hill to the E. of Bezwada. The river is here crossed by a great dam, or *anicut*, 3715 ft. long and 20 ft. above the bed level. From both ends navigable canals take off and irrigate about 800,000 acres of land.

The telegraph line from Madras to Calcutta is carried across the Kistna river in a single span. The distance from support to support is 5000 ft., and the average height above the river bed is about 400 ft., but in midstream the lowest wire sinks to 66 ft. above the crest of the *anicut*.

Excursions from Bezwada.

(1) In order to reach Undavalli village it is necessary to cross the Krishna from Bezwada by the

railway or *anicut*, and go $1\frac{1}{2}$ m. up the course of the river above and W. of Sitanagaram. There is a rock-temple of two storeys close to the village. Farther round the hill, in a recess to the S. and facing N., is the interesting five-storeyed Brahman excavation known as the Undavalli Cave. The upper storeys are all set back, one above the other, and there is no doubt the façade of the cave is meant to represent the exterior of some structural building. The lowest storey across the whole front has three rows of seven pillars partially hewn out. The second originally had four compartments; at the back of one of these is a shrine cell with an altar, and in another is a relief of Vishnu and his wives. The façade on the front here has a frieze of geese, and a cell at the left end one of elephants and lions. The third storey contains a hall 53 ft. by 36 ft., with a figure of Vishnu seated on the serpent Ananta, and of Narayana, 17 ft. long, resting on the great snake Shesha. The top storey consists of circular domes of the shape used in all Dravidian temples. The fifth storey, which was never completed across the whole front, is the lowest of all, to the right of the flight of steps up to the cave. The date of the excavation must be much the same as those of Mamallapuram (Route 34)—viz., 700 A.D.

(2) 17 m. W. of Bezwada by road is **Amaravati**, on the right, or S., bank of the Krishna River, once the capital of the Andhra kingdom. It is a place of much book interest to antiquarians as an ancient centre of the Buddhist religion, and the site of a great tope;¹ but scarcely anything remains *in situ* now, and what is left is not

¹ See Fergusson's *History of Indian Architecture*, vol. 1, pp. 80, 112, 119-123, and *Tree and Serpent Worship*, and Dr J. Burgess's *Amaravati and Jaggayapetta Stupas*, London, 1887.

worth a visit. The beauty of the tope can be judged from the splendid portions of it in the British and Madras Museums.

N. and N.W. of Amaravati are the sites of former diamond workings, all on the N. bank of the river.

A branch railway 50 m. long connects Bezwada with **Masulipatam** (Machhli-patnam or "Fish Town"; D.B., pop. 43,940), the headquarters and the principal port of the Krishna District. It was taken by the Bahmani Kings in the 15th century, and was afterwards held by the Golconda rulers. Masulipatam was early a principal settlement of the E.I. Company for trade on the E. coast. An English agency was established here in 1611, after the failure of that at Pulicat, and a factory eleven years later; the Dutch and French also had factories here. There are Dutch tombs dating from 1624. In 1690 a farman of the Delhi Emperor confirmed the English privileges; in 1750 the place was made over by the Nizam to the French, but was carried by storm by Colonel Forde on the night of 7th April 1759, 500 French and 2500 sepoys surrendering. The attacking force comprised only 346 European troops and 1400 sepoys—little more than half the strength of the defenders. This victory, one of the most brilliant ever accomplished by British arms, was the turning-point in the long conflict between French and English for the Empire of India. The fort is now dismantled. The chintzes of Masulipatam were once famous. The C.M.S. has an important centre here, with a college, affiliated to the Madras University.

Immediately S. of Bezwada is the Krishna Bridge, 1200 yards long outside abutments, with a depth of foundations 80 ft. below low water; it cost Rs.4,247,850.

784 m. **Tenali** (R.); a branch line (37 m.) passes through here from Repalle on the E. to Guntur junction (pp. 518, 519).

850 m. **Ongole** (R.).

901 m. **Bitragunta** (R.).

923 m. **Nellore** (D.B.; pop. 35,863), headquarters of the Nellore District; situated on the right bank of the *River Penner*. There are here Missions of the Roman Catholics, American Baptists, and Hermansburg Lutherans. A few cars available for hire. Good snipe shooting in the cold weather.

946 m. **Gudur** (R.). Centre of the mica mining industry. 89,947 cwts. were exported by sea in 1926, of the value of £820,901. Branch to (52 m.) Renigunta (p. 541) on the main line from Bombay to Madras (Route 26).

1010 m. **Ponneri**. 10 m. N.E. and 25 m. N. of Madras is **Pulicat**, where was the first Dutch Settlement in India. The fort which was built in 1609 was named Castel Geldria, and a representation of it is carved on one of the tombs in the old cemetery, which is one of the most interesting in India and contains many coats of arms. On the opposite side of the lake on which Pulicat stands is the small hamlet of Coromandel which is popularly supposed to have given its name to the whole of the E. coast. The word, however, is probably a corruption of Chola-mandalam, "the realm of the Chola kings."

1021 m. **Ennur** (Ennore), still a popular week-end resort from Madras, on a large backwater. A furnished bungalow can, as a favour, be obtained, and other bungalows are available. There are good boating and bathing.

1032 m. from Calcutta is **Madras** Central Station (Route 33).

MATHERAN

Panorama Point

Cottages
 Kollah Ho
 Gomes' Bungalow
 Underwood
 Florence Lo
 Birdwood
 Walk
 Little Chank Point
 Spring
 One Tree Hill
 Bluff of Chank
 Chank Hotel
 Sanitarium
 Spring
 Ramboult
 Old Chank Road
 Hindu Crematorium Ground



John Murray, Albemarle Street, London.

London. John Murray, Albemarle Street.

ROUTE 26.

BOMBAY to MADRAS by Kalyan Junction, Neral (for Matheran), the Bhore Ghat, Lonavla (for the Caves of Karli and Bhaja), POONA, Dhond (for Ahmadnagar), Sholapur, Hotgi Junction, Gulbarga, Wadi Junction, Rajchur, Guntakal Junction, Renigunta Junction (for Tirupati) and Arkonam Junction.

Rail 794 m. Mail train about 33 hours in transit. Fare, first class, Rs.79-3.

The Poona-Madras mail of the G.I.P. Ry. leaves Victoria Terminus (Bombay) daily, and follows the same route as the Bombay-Calcutta mail (Route 2) as far as

34 m. from Bombay, **Kalyan Junction**. From Kalyan the Calcutta mail goes N.E. up the Bhore Ghat, and the Poona-Madras mail ascends the **Bhore Ghat**. The system of electrification is being extended to the mail trains on the section between Bombay to Poona; and the journey has been shortened considerably by the completion of the realignment which has eliminated the Reversing Station on the Bhore Ghat (see p. 522).

The country below the Ghats as far S. as N. Kanara is known as the **Konkan**—that above the Ghats from the Godavari (formerly from the Vindhya mountains) to the S. as the **Deccan** (Sansk., *dakshina*, "southern").

The first station on the Poona line, after leaving Kalyan, is

38 m. **Ambarnath**, "Immortal Lord," a village of 300 inhabitants, which now gives its name to a small *taluka*, which is being specially developed as a factory town, subsidiary to Bombay. 1 m. E. is the Temple of Ambarnath, in a pretty valley. It is an object of considerable interest as a specimen

of genuine Hindu architecture, covered with beautiful designs, in which birds and the heads of the lion of the South are introduced. The roof of the hall is supported by four richly-carved columns. The pediment of the doorway leading into the vimana (shrine) is ornamented with elephants and lions, and in the centre with figures of Siva. A curious belt of beautiful carving runs up each face of the vimana. An inscription inside the lintel of the N. door gives the date of the building of the temple as=860 A.D.

54 m. **Neral station (R.)**. For **Matheran** leave the rail here, and ride or "dandi" up 8 m. in 1½ hrs., or take the steam tramway (2 ft. gauge) to Matheran, 13 m. Ponies, munchils (palanquins) or rickshaws available, if ordered from Matheran. (Fares—Tramway, Rs.6 and Rs.2-4; ponies, Rs.5-6; munchil, Rs.7-8; rickshaw, Rs.8.)

Matheran, "the wooded head," or "mother forest," is an outlier of the Sahyadri range, varying from 2300 ft. to 2600 ft. above the sea-level, and is an agreeable airy summer resort for the people of Bombay. The Granville and the Rugby are the hotels favoured by English visitors. The crown of the hill where the station is situated forms a narrow undulating tableland running N. and S., thickly covered with small tree growth, with spurs separated by ravines on all sides, with precipitous slopes everywhere, sometimes 1500 ft. high, the spurs terminating abruptly in bluffs called "points." Among the finest of these are Porcupine, Hart, and Monkey Points to the N.W., from which Bombay Harbour can be seen, Chauk Point, the S. extremity, where the old road of ascent emerges: and several points on the E. from which Khandala and the Ghats are visible. The finest of all is *Panorama Point*,

to the N. of the bungalows. The distance is a little over 4 m. The road leads through a thick jungle of beautiful trees, and about $\frac{1}{4}$ m. from Panorama Point comes to a point parallel with Porcupine Point, where a precipice descends abruptly 1000 ft. At 100 yds. from its termination the road goes quite round the brow of the peak, and affords an extremely beautiful panoramic view. To the left are Hart Point and Porcupine Point, at the N. and N.W. extremities of a promontory shaped like the head of a battle-axe. Between Matheran and Prabal the mountain sinks down abruptly to the plain. From Panorama Point the Bawa Malang Range, 10 m. long, with strange cylindrical or bottle-shaped peaks, is visible some 15 m. to the N.

The extreme W. end of this range is known as the "Cathedral Rocks." The huts of Neral village lie directly below, and beyond them is the curving line of the G.I.P. Railway. Bombay and its shipping may be seen from this point on a clear day under the evening light.

62 m. **Karjat** junction station. From here a short line runs S. (9 m.) to **Khopoli**, but it is only used in the dry season. At Karjat the engine is changed for one much more powerful to ascend the **Bhor Ghat**, which begins 1 m. from Karjat. The gradient is 1 in 42, and even 1 in 37, and all the trains are furnished with powerful brakes. The line first rises up the slope of the long spur which ends in the hill called **Londgiri**, which encloses the N. side of the **Kampoli Valley**, and at the height of 1000 ft. passes by a tunnel to another wooded valley on the N., which soon terminates in an extremely fine and beautifully-wooded ravine. The old Reversing Station, 1350 ft. above the sea, is situated on an elevated spur, affording grand views of the ravine. From the station which has been superseded by the

realignment completed in December 1928, can be seen the curious sheer rock called "the Duke's Nose," and by the people **Nāg-phudi** (the Cobra's Hood). A cement-lined tunnel, 3000 ft. long and 35 ft. in width, has been driven through the rock, and a fine bridge carries the line over the ravine. The works were executed by the **Tata Construction Company** at a cost of about £450,000.

In the rains innumerable waterfalls may be seen shooting and streaming down the ravine sides, several near the head of it being very grand; and at all times of the year this part of the **Ghat** is extremely beautiful, and should certainly be visited. Indeed, the series of precipitous hillsides of sheer rocks form in the monsoon almost a continuous waterfall, surrounded by vivid green vegetation. The line now winds round to the E. side of the **Khopoli Valley**, and makes its way round the crest of the tableland to **Khandala**, which stands at the head of the ravine.

The **Power Station** of the **Tata Hydro-Electric Works** is situated in the **Kampoli Valley**, at the foot of a fall of some 1700 ft. by which the water from the lakes at the top, near **Lonauli**, descends in mighty steel pipes, lying on the rocks at a steep angle, in successive stages. Here five huge turbines generate a current at 5000 volts, transformed in the station to a pressure of 100,000 volts, which is conveyed by six wires on ironwork towers to **Bombay**, a distance of some 43 m. in a direct line, where it supplies mills, tramways, and light.

78 m. **Khandala** * (**Public Works Department Bungalow**, for the use of officials on tour). This beautiful village is a favourite retreat for the inhabitants of **Bombay** from the distressing heat of the summer months. The site is well chosen: it overlooks the great ravine, the sheer depth of which is

in great part concealed by luxuriant trees. Above the head of the ravine, to the S. is the magnificent hill called the Duke's Nose, whence is a fine view over the Konkan. The ascent is by the S. shoulder, and is very steep. There is a *Convalescent Home* at Khandala in connection with St George's European Hospital, Bombay.

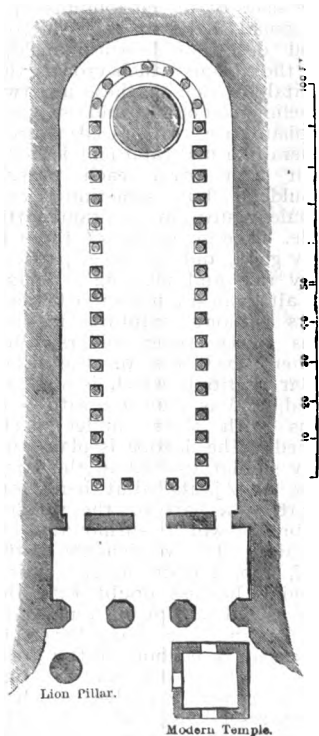
The *Waterfall* on the right side of the ravine, near its head, is very fine in the rains, the upper of the two falls into which it is divided having a clear leap of 300 ft.

80 m. **Lonavla** (Lonauli) station * (R.). Here are the G.I.P. Railway Company's School and Church, and a large European community of railway servants. The storage and head-works of the Tata Electro-Hydraulic Scheme for Bombay (p. 26) are situated at Lonauli. A traveller desiring to see the great cave at *Karli* ($7\frac{1}{2}$ m.) and the caves of *Bhaja* ($6\frac{1}{2}$ m.) should, unless he is prepared to walk 8 m. to 10 m. (and even then the trains which stop at Malavli station may not prove very convenient), arrange to make the expedition from Lonauli by tonga, which in fair weather can go off the Great Trunk Road S. to the Malavli station, $\frac{3}{4}$ m. distant from the caves of Bhaja, and N. to the base of the rocky ridge of the Karli cave. An Indian caretaker resides within $\frac{1}{4}$ m. of the Bhaja cave. At ordinary times, therefore, one can drive comfortably to the foot of the Karli cave and nearly to Bhaja. The ascent to the former is nearly 400 ft. by a good path, with a fairly easy gradient; if a pony is desired for this, it must be sent out from Lonauli.

85 m. **Malavli** station * (District Bungalow, for the use of officials on tour). The *celebrated cave* is on a hill about 4 m. from the station.

The following is an abstract

of Fergusson's description of it:¹ "The cave of Karli is certainly the largest, as well as the most complete, chaitya cave in India, and was excavated at a time when the style was in its greatest purity, and is fortunately the best



Cave at Karli.

preserved. Its interior dimensions are 124 ft. 3 in. in total length, 81 ft. 3 in. length of nave. Its breadth from wall to wall is 45 ft. 6 in., while the width of the central

¹ *Rock-cut Temples of India*, p. 27. See also *Indian Architecture*, I, 142, and *Architectural Antiquities of Western India*, p. 4, by H. Cousens (India Society, London, 1926).

aisle is 25 ft. 7 in. The height is only 46 ft. from the floor to the apex. The building resembles an early Christian church in its arrangements, while all the dimensions are similar to those of the choir of Norwich Cathedral." The nave is separated from the side aisles by fifteen columns with octagonal shafts on each side, of good design and workmanship. On the abacus which crowns the capital of each of these are two kneeling elephants, and on each elephant are two seated figures, generally a male and female, with their arms over each other's shoulders, but sometimes two female figures in the same attitude. The sculpture of these is very good, and the effect particularly rich and pleasing. Behind the altar are seven plain octagonal piers without sculpture, making thus thirty-seven pillars altogether, exclusive of the Lion Pillar in front, which is sixteen-sided, and is crowned with four lions with their hinder parts joined. The dagoba is plain and very similar to that in the large cave at Ajanta,¹ but here, fortunately, a part of the wooden umbrella which surmounted it remains. The wooden ribs of the roof, too, remain nearly entire, proving beyond doubt that the roof is not a copy of a masonry arch; and the framed screen, filling up a portion of the great arch in front, like the centring of the arch of a bridge (which it much resembles), still retains the place in which it was originally placed. At some distance in advance of the arched front of this cave is placed a second screen, which exists only here and at the great cave at Kanheri,² though it might have existed in front of the oldest chaitya caves at Ajanta.¹ It consists of two plain octagonal columns with pilasters. Over these is a deep plain mass of wall,

occupying the place of an entablature, and over this again a superstructure of four dwarf pillars. Except the lower piers, the whole of this has been covered with wooden ornaments; and, by a careful examination and measurement of the various mortices and footings, it might still be possible to make out the greater part of the design. It appears, however, to have consisted of a broad balcony in front of the plain wall, supported by bold wooden brackets from the two piers, and either roofed or having a second balcony above it. No part of the wood, however, exists now, either here or at Kanheri. It is more than probable, however, that this was the music gallery or Nakkhar Khana, which we still find existing in front of almost all Jain temples, down even to the present day. Whether the space between this outer and the inner screen was roofed over or not is extremely difficult to decide. To judge from the mortices at Kanheri, the space there would seem to have had a roof; but here the evidence is by no means so distinct, though there is certainly nothing to contradict the supposition. There are no traces of painting in this cave, though the inner wall has been plastered, and may have been painted; but the cave has been inhabited, and the continuous smoke of cooking-fires has so blackened its walls that it is impossible to decide the question. Its inhabitants were Saivites, and the cave was considered a temple dedicated to Siva, the dagoba performing the part of a gigantic lingam, which it resembles a good deal. The outer porch is 52 ft. wide and 15 ft. deep. Here originally the fronts of three elephants in each end wall supported a frieze ornamented with a rail pattern, but at both ends this has been cut away to introduce figures. Above was a thick quadrantal moulding, and then a

¹ P. 71.² P. 32.

rail with small façades of temples and pairs of figures.

"It would be of great importance if the age of this cave could be positively fixed; but though that cannot quite be done, it is probably antecedent to the Christian era; and at the same time it cannot possibly have been excavated more than 200 years before that era. From the Sinha-sthamba (lion pillar) on the left of the entrance Colonel Sykes copied an inscription, which Mr Prinsep deciphered in vol. 6 of the *Journal of the Asiatic Society*. It merely says: 'This lion-pillar is the gift of Ajmitra Ukass, the son of Saha Ravisabhotti'; the character, Mr Prinsep thinks, is of the 1st or 2nd century B.C. From its position and import, the inscription appears to be integral, and the column is certainly a part of the original design. I am inclined to think the date, 160 B.C., is at least extremely probable.

"It would be a subject of curious inquiry to know whether the woodwork now existing in this cave is that originally put up or not. Accustomed as I had long been to the rapid destruction of everything wooden in India, I was half inclined to be angry when the idea first suggested itself to me; but a calmer survey of the matter has convinced me that it is. Certain it is that it is the original design, for we find it repeated in stone in all the niches of the front, and there is no appearance of change or alteration in any part of the roof. Every part of it is the same as is seen so often repeated in stone in other and more modern caves, and it must, therefore, have been put up by the Buddhists before they were expelled; and if we allow that it has existed 800 or 1000 years, which it certainly has, there is not much greater improbability in its having existed near 2000 years, as I believe to be the case. As far as I could ascertain the

wood is teak. Though exposed to the atmosphere, it is protected from the rain, and has no strain upon it but its own weight, as it does not support the roof, though it appears to do so; and the rock seems to have defied the industry of the white ants."

The principal viharas at Karli to the right of the entrance to the chaitya are three tiers in height. They are plain halls with cells, but without any internal colonnades, and the upper one alone possesses a veranda. The lower fronts have been swept away by great masses of rock which have rolled from above. To the left of the chaitya are some smaller viharas and cisterns.

The Caves of Bhaja and Bedsa.¹

—Bhaja is a village $\frac{3}{4}$ m. S. of Malavli railway station, and Bedsa is $5\frac{1}{2}$ m. to the E. of Bhaja. The caves of Bhaja date from 200 B.C. There are eighteen excavations, of which the Chaitya No. 12 is one of the most interesting in India. It contains a dagoba, but no sculptures, and has its roof supported by twenty-seven sloping pillars. Outside there is a group executed in bas-relief, now much defaced, and marks show that a wooden front was once attached to the great arch. On both sides of the chaitya the hill has been excavated into the usual halls of instruction, with cells. A little way to the S. is a curious collection of fourteen dagobas, five of which are inside and the others outside a cave. On the first of the latter there is an inscription. The last cave to the S., some way beyond the others, is a vihara $16\frac{1}{2}$ ft. by $17\frac{1}{2}$ ft., decorated with excellent and interesting sculptures, including one of a prince on an elephant and another of a prince in his chariot, and three armed figures. The caves at Bedsa lie about 4 m. S.E. from the station be-

¹ A full account of these places will be found in *Cave Temples of India*, pp. 223, 228.

yond Malavli, and date a little later than Bhaja. The plan of the chaitya resembles Karli, but is neither of so great extent nor so well executed, and appears more modern. It contains a dagoba; and its roof, which is ribbed and supported by twenty-six octagonal pillars 10 ft. high, seems to have been covered with paintings, which are now, however, so indistinct that nothing can be made out of them. There are four pillars about 25 ft. high in front, surmounted by a group of horses, bulls, and elephants, with a male and female rider upon them. These groups resemble those found on the Indo-Mithraic coins of the N. The hall of instruction has an apsidal end and a vaulted roof, and is situated close to the left of the chaitya. It contains eleven small cells, and over the door of one of them there is an indistinct and partly defaced inscription.

96 m. **Vadgaon** (Wargaon) station, a very large and flourishing village, celebrated for the defeat of a British force under Lieutenant-Colonel Cockburn, on the 12th and 13th of January 1779, and for a convention concluded with the Mahrattas by General John Carnac of the Bombay Council, who was acting as Civil Commissioner. The convention was repudiated by Warren Hastings, who replied to it by despatching Col. Goddard across India to occupy Ahmadabad (p. 200) with troops from Bengal.

116 m. **Kirkee** station is only $3\frac{1}{2}$ m. from Poona, and may be considered part of the same place. It is interesting as being the scene of a victory over Baji Rao II., the last Peshwa. The encounter took place on the wide plain S.E. of Government House, now used as the Artillery parade-ground. On the 1st of November 1817 the dispositions of that Prince had

become so threatening that Mountstuart Elphinstone, then Resident at Poona, determined to remove the troops from the Cantonment of that place to Kirkee, where, on the 5th, they took up a good position to the E. of an eminence, on which the village of Kirkee stands, and where the stores and ammunition were stationed. In the rear of the troops was the River Mula, and from the S. and W. advanced the masses of the Peshwa's army, amounting to 8000 foot, 18,000 horse, and 14 guns, besides a reserve of 5000 horse and 2000 foot with the Peshwa, at the sacred hill of Parbati (p. 533). Elphinstone then directed Col. Burr to move out to meet them. The Cantonment at Poona and the Residency (p. 531) at the Sangam (or meeting of the rivers) had been plundered and burnt on the 1st as soon as the British troops quitted them. One regiment, commanded by Major Ford, was at Dapuri, N. of Kirkee, and the total strength of the English, even when it joined, was, according to Grant Duff, only 2800 rank and file, of which 800 were Europeans.

Bapu Gokhale (who had accompanied Sir Arthur Wellesley in his campaigns of 1803-1805) commanded the Peshwa's army. Its advance was compared by Grant Duff, an eyewitness, to the rushing tide called the bore in the Gulf of Cambay.¹ Colonel Burr, who commanded the British, was now informed that Major Ford was advancing with his regiment from Dapuri, on the W., to join him; and in order to facilitate the junction he moved the main force to a position about a mile in advance, and to the S.W. of the village of Kirkee. The Mahratta leaders had been tampering for some time with the regiment, and they fully expected it would come over, as it was

¹ *Grant Duff*, 2, 480 (Oxford University Press edition, 1921).

paid by the Peshwa. A strong body of horse, therefore, under Moro Dikshit, the Prime Minister of the Peshwa, advanced about 4 P.M. upon the Dapuri battalion, but Major Ford, throwing back his right wing, opened a heavy fire upon the Mahrattas, both of musketry and from three small guns commanded by Captain Thew. A good many Mahrattas fell, and among them Moro Dikshit. In the meantime Gokhale had organised an attack on the left flank of the British main force, and this was led by a regular battalion commanded by a Portuguese named De Pento; and after his discomfiture a select body of 6000 horse, with the Jari Patka, or golden pennon, flying at their head, charged the 7th Bombay Infantry as they were pursuing De Pento's men. Gokhale's horse was wounded in this charge, and his advance was stopped; but there were other gallant leaders—such as Naro Pant Apte and Mahadeo Rao Rastia—and it was well for the sepoys that a swamp in their front checked the charge of the Mahrattas, whose horsemen rolled headlong over one another in the deep slough. As it was, some cut their way through the sepoy battalion; but, instead of turning back, when they might have destroyed the regiment, they rode off to plunder the village of Kirkee, whence they were repulsed by a fire of grape. After this charge the Mahrattas drew off with a total loss of about 500 men, while that of the British was but 86. On the 13th General Smith's army arrived from Sirur, and on the 17th crossed the Mula-Mutha River at Yeravda (Yerowda) ford, meeting with only slight resistance from the Peshwa. Poona city now opened its gates to the victors. The most remarkable feature of the Battle of Kirkee was, perhaps, the extraordinary steadiness of Major Ford's regiment under great temptation.

In it were upwards of seventy Mahrattas, yet not a man deserted on the day of battle, though promised vast sums to join their countrymen. After the action the Mahrattas, but only the Mahrattas, joined the enemy.

Kirkee is the headquarters of a brigade of *Field Artillery*, and of the famous corps of Bombay Sappers and Miners. $\frac{1}{2}$ m. N.E. of the barracks is the *Small Arms Ammunition Factory*, and to the N. is the *Arsenal* (permission to enter either must be obtained from the officer in charge).

All Saints Church, Kirkee, in the Artillery Lines, was consecrated in 1841. There are two colours of the 23rd Regiment Bombay Light Infantry inside the W. door. Amongst the memorial tablets is one to thirty officers of the 14th King's Light Dragoons, who died or were killed between 1841 and 1859, and another to ninety non-commissioned officers of the same regiment.

N.E. of the Artillery Mess is the *Roman Catholic Chapel of St Ignatius*.

One of the most interesting spots at Kirkee, passed on the road to Poona, is *Holkar's Bridge*, over the Mula River, a stream which encircles Kirkee on the N., E., and S. In the floods of July 1912 this bridge was several feet under water. The river is 200 yds. broad at this spot. About 60 yds. S.W. of the S. end of the bridge is *Holkar's Tomb*, a temple to Mahadeo (Siva) in an oblong enclosure, erected in memory of Vithoji Rao Holkar, who was trampled to death by an elephant at Poona in 1800 (p. 533) and his wife, who became a *sati*. On the right of the road is an old English cemetery, and on the left, about 300 yds. to the N., is the New Burial Ground. After crossing the Mula the road passes on the left the Sappers' and Miners' Lines, and after them the Deccan College and the lines of a Regiment of

Pioneers, right. Beyond these are the *Jamsetji Bund*, the *Fitzgerald Bridge*, and the *Bund Gardens*, for all of which, see below under Poona.

Government House is at Ganesh Khind, $1\frac{1}{2}$ m. S.W. of Kirkee railway station and $3\frac{1}{2}$ m. N.W. of the city of Poona. The name is derived from a small *khind*, or pass, between hills, about $\frac{1}{2}$ m. S.E. of the house, which resembles a modern French château, and has a tall, slim tower, 80 ft. high, from the top of which there is a fine view, including Kirkee, with its Arsenal, the Deccan College, and the Parbati Hill. It was built in 1866 to supersede the old Government House at Dapuri, a fine building, which had been Major Ford's headquarters in 1817, and has of recent years been used successively as a brewery and a store for the Public Works Department. The house contains the usual reception rooms, a ball-room, darbar-room, etc., and has a flower gallery, or garden corridor, 90 ft. long.

To the N. of Government House are the **Botanical Gardens**.

119 m. **POONA**, * junction of the G.I.P. and Madras and S. Mahratta Railways. The railway station is situated at a corner of the city and Cantonment, and close to the public offices. The Cantonment is E. of the city, covering an area of $4\frac{1}{2}$ sq. m. within its limits. N. to the Mutha-Mula River and for 2 m. along the road leading to Kirkee Cantonment are the houses of the greater part of the European population. The remaining European quarter, known as the Civil Lines, is to the N.W. of the Cantonment, and is divided by the railway line into two sections. Poona (lat. $18^{\circ} 31'$, long. $73^{\circ} 51'$; altitude 1850; pop. 214,796) is the residence of the Government of Bombay during the

rains. It is the headquarters of the Southern Command and Poona District; and was the former capital of the Mahrattas. The first mention of Poona is in the Mahratta annals of 1599 A.D., when the parganahs of Poona and Supa were made over to Malaji Bhonsla (grandfather of Sivaji) by the Nizam Shahi Government. In 1750 it became the Mahratta capital under Balaji Baji Rao, the Brahman Peshwa, or chief minister, whose father had deposed the descendants of Sivaji and imprisoned them in the Fort of Satara (p. 547). In 1763 it was plundered and destroyed by Nizam 'Ali, and here, on the 25th of October, Jaswant Rao Holkar defeated the combined armies of the Peshwa and Scindia, and captured all Scindia's guns, baggage, and stores. After the battle of Kirkee (p. 526), on 17th November 1817, Poona surrendered to the British. The city stands in a somewhat treeless plain on the right of the Mutha River, a little before it joins the Mula. At its extreme S. limit is the Hill of Parbati, so called from a celebrated temple of the goddess Durga, or Parbati, on its summit (see p. 534). A few m. to the E. and S.E. are the hills which lead up to the still higher tableland in the direction of Satara. The station is healthy and the climate pleasant. The *Aqueduct* was built by one of the Rastias, a family of great distinction amongst the Mahrattas. There are also extensive waterworks, constructed mainly through the liberality of Sir Jamsetjee Jeejeebhoy.

The Gymkhana Assembly Rooms, in the middle of the station, were built in 1888, and consist of a large building with a handsome ball-room, with a stage at one end for theatricals. In the grounds of the building are lawn-tennis courts, a covered Badminton court, and a fine cricket ground. The United



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Service Library and Reading Room are in the upper storey.

Near the Assembly Rooms, on the road to the Bund Gardens, is the **Council Hall**, containing some pictures of interest, including those of Sir Bartle and Lady Frere, Lord Napier of Magdala, Sir Salar Jang of Hyderabad, Maharaja Khande Rao Gaekwar, and other notable men of Western India.

Opposite the Council Hall is the **Daftar** or **Record Room**, which contains priceless records of the Peshwas.

The **Sassoon Hospitals**, in the Gothic style, are at the end of the Arsenal Road. The total number of beds is 226. This includes 49 beds in the Jacob Sassoon Hospital for Europeans and Jews. The latter hospital, to the S. of the railway station, was built in commemoration of the visit of the then Prince and Princess of Wales to India in 1905-6. It was designed by the Consulting Architect to the Government of Bombay, and erected by the P.W.D. The total cost, amounting to over Rs.200,000, was borne by Sir Jacob Sassoon. The foundation-stone was laid by Lord Lamington, and the building was opened in 1909 by Sir George Clarke (now Lord Sydenham). The nursing is carried on by the Hospital Nursing Association, supervised by the Wantage Sisters. There is a medical school for the training of sub-assistant surgeons attached to the hospitals.

Fronting the main gate is the handsome **War Memorial**, erected by public subscription in honour of "the Men of all classes and creeds, who went forth from this City and District of Poona to fight for the Empire in the Great War."

Opposite the hospitals are the **Collector's Cutcherry** and the **Government Treasury**. Close by is a large building in grey stone,

erected in 1915, to accommodate the Government Offices. About 250 yds. S. of St Paul's Church is the **Jews' Synagogue**, a red brick building with a tower, 90 ft. high, consecrated 29th September 1867. **Mr David Sassoon's Tomb** adjoins the synagogue, which was built by him. The mausoleum is 16 ft. sq. and 28 ft. high.

The **Poona Arsenal**, with a notable masonry tower, is S. of St Paul's Church, and some distance beyond, still farther S., is **St Mary's Church**, consecrated by Bishop Heber in 1825. Here tablets are erected to the memory of many officers of distinction. The font, in the S.W. corner of the church, is surrounded by stained-glass windows.

E. of the church are the **General Parade Ground**, the **Race-course**, the latter, about 1 m. long, included in the former, and the **Turf Club**. The Poona races are held from July to September. Close to it are the **Gymnasium**, **St Andrew's Presbyterian Church**, and the **Masonic Lodge**; to the N. are the **Ghorpuri Barracks**, and to the S. the **Wanauri Barracks** for British troops.

To the E. of the Race-course are the celebrated **Empress Gardens**, containing grand specimens of tropical forest trees; and S. of these the handsome **R.C. Cathedral** dedicated to St Patrick.

Two Scottish Missions (Free and Established Church), the **American Mahratta Mission** and **C.M. Zenana Mission**, are conducted in the city and suburbs.

The **Society of St John the Evangelist** has a mission at Poona; the mission-house is at Panch Howds, Vetar Peth. In the compound stands the fine **Church of the Holy Name**, with a lofty campanile, modelled on the famous Campanile at Venice, and a good peal of bells. There are boys' schools, an Industrial School, an

Orphanage, a School for Catechists, and a Hospital.

The *Sisters of St Mary the Virgin* (Wantage) have also their mission-house at Panch Howds, and in the compound the Epiphany School for high-caste girls, and St Michael's School for low-caste girls. The Sisters have also under their charge St Mary's High School for European and Eurasian girls (self-supporting), a village school at Parbati, and another at Yerandawana, 1 m. from Poona.

The Sangam is the name given to the tongue of land at the confluence of the Mutha River, flowing from the S., with the Mula River, coming from the N.W., and is perhaps the most central spot of the combined city and Cantonments.

The Wellesley Bridge, 482 ft. long and 28½ ft. broad, crosses the Mutha River to the Sangam promontory, close to its confluence with the Mula. It takes the place of a wooden bridge erected to commemorate the victories of the Duke of Wellington in India. The present bridge, designed by Col. A. U. H. Finch, R.E., cost Rs.111,000, and was opened in 1875.

On the left hand, after crossing the Wellesley Bridge, are the *Judge's Court*, the *Poona Engineering College*, and E. of it a long, low picturesque building (Sangamvadi), now occupied by the District Judge. It stands on the site of the British Residency, in which Mountstuart Elphinstone was living at the time of the rupture with the last Peshwa, Baji Rao II. Elphinstone retired from it to Kirkee before the battle, and the Mahrattas plundered the building and pulled it down. At the E. end of Wellesley Bridge is a path to the left, which leads down to a pretty garden filled with fruit-trees and containing several temples. The first has a tower 40

ft. high. In the middle of the garden is a second temple, nearly as broad but not so high. A third temple at the end of the garden was built by Holkar, who destroyed two other old temples to build it. All are dedicated to Mahadeo, and, though small, are extremely handsome. At 300 yds. from the Engineering College is Mr Bomanjee Dinshaw Petit's house, called Garden Reach. It was built between 1862 and 1864, and cost £80,000. Permission to view is usually granted on application when the family is not in residence. The gardens are beautiful, and extend along the banks of the river. The rooms in the principal house are floored with marble. The fine dining-room is connected with the house by a long, open gallery. Beside it is an open room, with sides of carved wood, where the Sassoon family, the former owners, used to dine during the Feast of Tabernacles. The ceiling of the drawing-room was beautifully decorated by Poona artists. In it is a full-length portrait of Mr David Sassoon. A fountain in the garden and the water-tower should be noticed.

After passing the Engineering College, a side road over the level crossing leads to the Veterinary School, the Police Headquarters and Training College at Bhamburda. The main road continues to Government House, Ganeshkhind (p. 528). On the road to Ganeshkhind is the new *Meteorological Observatory*, which was opened by Sir Leslie Wilson in July 1928; the Indian Meteorological Department has been transferred here from Simla. On the return from Ganeshkhind the city is reached by a road passing the *Fergusson College*, built in 1884, and containing accommodation for 800 students, the *Bhandarkar Oriental Institute*, and the *Women's College* at Hingne. On the left as the city is approached from

Ganeshkhind is the handsome *College of Agriculture* (built in 1911 from designs prepared by the late Mr G. Wittet), with extensive gardens, which attract students from all parts of India. Its white dome forms a conspicuous landmark.

From Garden Reach it is a pleasant drive of $1\frac{1}{2}$ m. *via* the Boat Club and Holkar's Bridge, to the *Jamsetji Bund* and the *Fitzgerald Bridge*. Across the bridge is Yeraoda (Yerrowda), where H.H. the Aga Khan has a large palace. If the drive be extended so as to include the high ground adjoining the Kirkee Arsenal, a very fine view is obtained of Poona and its surrounding hills. The *Bund* is of stone thrown across the Mula River, and on the S. side of it are the beautiful *Bund Gardens*, of 6 acres.

Opposite the *Bund* is *Bund Hill*, on which stands an ancient temple, and the *Purna Kuti Palace*, erected by the late Sir Vithaldas Thackersey. Here the British guns were mounted during the crossing of the Yerrowda ford (17th November 1817): and hence comes the alternative name of *Picquet Hill*.

The view of the *Fitzgerald Bridge* from the *Bund Gardens* is very pretty; above it is the broad stream, 350 yds. wide, on which regattas take place, chiefly in February. Farther along in the direction of Kirkee (see above) is the *Deccan College*, built of grey trap-stone, in the Gothic style, at a cost of Rs.245,963, of which half was contributed by Sir Jamsetjee Jeejeebhoy. It was designed by Captain H. C. Wilkins, R.E., and consists of the central block, two storeys high, with two wings, forming three sides of a quadrangle, surmounted by a high-pitched iron roof coloured red. The wings are occupied by students, and the main building contains class-rooms and laboratories, with

a lofty College Hall, 70 ft. long, above, used for the Library.

The *Deccan College*, which was removed to the present building in 1864, was originally the Poona Sanskrit College. The hall contains portraits of former principals and professors, including Dr Wordsworth, a nephew of the poet, Sir Ram Krishna Bhandarkar and Prof. Kielhorn, the great Orientalists, Mr F. W. Bain, the author of *The Digits of the Moon*, and Sir Edwin Arnold; and also of the founder, Sir Jamsetjee Jeejeebhoy, the first Parsi baronet. Beyond the Deccan College the road leads N. to the Mental Hospital and the Central Jail, S. of which is the Golf-course.

The *Khumbarves Dharan Causeway* on the Mutha River at the approach from the Bombay Rd. is replaced by the *Lloyd Bridge* (514 ft. by 53 ft., 11 spans, costing $8\frac{1}{2}$ lakhs), which forms an impressive entrance to the heart of Poona city. It was opened by Sir George (now Lord) Lloyd, Governor of Bombay, in 1922. New Law Courts are in course of erection near the bridge.

For an Indian town the streets of the *City of Poona*¹ are wide, and some of the older houses are substantial and picturesque buildings. It is divided into nineteen divisions, called *peths*, some of them named after the days of the week on which the market was held. Amongst the industries of the town may be mentioned the making of gold and silver thread and wire for embroidery and for a simple kind of jewellery, the stringing of beads and berries for ornaments, and brass-work of all kinds.

The most convenient way of entering the city is by crossing the *Lloyd Bridge*. The road leads

¹ See *Thirty-four Years in Poona City*, by E. F. Elwin (Mowbray & Co., 2nd Edn., 1922); *Poona in Bygone Days*, by D. B. Parasnis (Times Press, Bombay, 1922).

past the interesting *Panchaleshwar Temple*, of great antiquity, and the site selected for the *Sivaji Memorial Hall*, of which the foundation-stone was laid by the Prince of Wales in 1922. The equestrian *Statue of Sivaji* was unveiled by Sir Leslie Wilson, Governor of Bombay, on 18th June 1928. The massive bronze figure, which is the work of Mr V. P. Karmokar, an Indian sculptor, and was cast in Bombay, is 31 ft. high and weighs 8½ tons. Poona owes this striking memorial of the Mahratta national hero largely to the exertions of his descendant, the Maharaja of Kolhapur (p. 549).

On the further side of the river is the magnificent gateway of the *Shanwar Wada* (Saturday Palace), which was the residence of the Peshwas for half a century. It was built by the grandfather of the last Peshwa, and was a grand building, till burnt down in 1827. Only the massive walls remain. Recent excavations have disclosed the gardens of the palace with their elaborate system of irrigation. The spikes in the gate should be noted; they were placed to prevent the forcing of the doors by elephants. Remains of frescoes are also to be seen. Within are the Guard-house and Nakkar Khana (drum room). Above the gateway is a small balcony. Here is the terrace from which, in 1795, the young Peshwa, Madho Rao Narayan, threw himself, and died two days afterwards of the injuries he received in the fall. Here, too, in 1773, Narayan Rao was savagely murdered by two of his guard at the age of eighteen, after he had been but nine months Peshwa. It was in the Shanwar-wada that Sir Charles Malet, the first British envoy to Poona, was received by the Peshwa in 1790.

In front is an open space where a vegetable market is held. A small memorial to the Mahratta

soldiers who fell in the War stands here. About 110 yds. to the N. is a stone bridge, over which a road leads to the village of Bhamburda and the Sangam. Bhamburda is 2 m. W. of the Poona railway station, and ¼ m. N. of Poona city.

Not far from this castle is a street in which, under the last Peshwa, offenders were executed by being trampled to death by elephants. One of the most memorable of these executions, on account of the princely rank of the sufferer, was that of Vithoji Holkar, brother of that Jaswant Rao Holkar who, the same year, won the Battle of Poona. The last of the Peshwas, Baji Rao II., witnessed the scene from a window of his palace, where, on the morning of the 1st of April 1800, he took his seat with his favourite Balaji Kunjar.

In the Budhwar, or "Wednesday," quarter of the city are some old Mahratta Palaces and the quondam residence of the well-known Minister Nana Farnavis—a shabby mansion with a small courtyard and fountain and many small dark rooms and dingy passages. The visitor should on no account miss the delightful *Visram Bagh* palace, with its beautiful pillars and courtyard, and its wooden porch. This almost perfect example of an old Mahratta palace has been used in turn as a Sanskrit College, a High School, and a Court.

In Shukruwar (Friday) Peth the United Free Church of Scotland Mission have built a fine up-to-date hospital, known as the N.M. Wadia Hospital, as the trustees of Mr Wadia contributed Rs.50,000 towards its construction. The Government of Bombay gave an equal amount as grant-in-aid.

The **Parbati Hill**, with its temples, is situated at the extreme S.W. of the town on the road to the Kharakwasla reservoir (see

p. 535), about $3\frac{1}{2}$ m. from the Poona ry. stn.; the road to Sinhgargh leads to it past the *Hirabagh*, or "Diamond Garden." In a cemetery here, very well kept and shaded with trees, is interred the celebrated African traveller Sir William Cornwallis Harris, Major in the Bombay Engineers, who died in 1848.¹ The Hirabagh had a lake and island and the villa of the Peshwas, mosque, and temples, and was a charming place. Lord Valentia mentions it in his account of a visit to the Peshwa in 1804. The lake has been drained for sanitary reasons, and the building is occupied by a social club, which is open to members of all nationalities. The temple at Parbati was built by the Peshwa Balaji Baji Rao, who ruled from 1740 to 1761, but in honour, it is said, of the Raja of Satara. A long succession of steps and ramps leads up to the top of the hill and to the temples. At each corner of the first court are small shrines to Surya (the Sun), Vishnu, Kartikkeya (the Hindu Mars), and Durga; and in the centre is the principal temple dedicated to the goddess Durga or Parbati, the wife of Siva, so called from Parbat, "a mountain," as she is said to be the daughter of the Himalaya. In the temple is a silver image of Siva, with images of Parbati and Ganesh, of gold, seated on his knees. The temple and its approaches are said to have cost £100,000. During the Diwali it is lighted up in a beautiful manner. On the N.W. side of the enclosing wall is a picturesque Moorish-looking window, whence, it is said, Baji Rao watched the defeat of his troops at Kirkee. From the top of this wall, reached by narrow steps, there is an extensive view over Poona, Kirkee, and surrounding country, including Parbati Tank, to the E., and Parbati village,

¹ He was the author of *Wild Sports in the West* and the *Highlands of Ethiopia*

S. of the tank, over the Hirabagh to St Mary's Church and the Jews' Synagogue, far to the N.E. To the S.W. is a ruined palace of the Peshwas, which was struck by lightning in 1817, the year of Baji Rao's overthrow by the British. A rupee may be given to the Brahman who shows the place, for the benefit of the temple and the numerous blind persons who frequent the hill. At the foot of the hill is a square field, which in the time of the Peshwas was enclosed by high brick walls. Here, at the end of the rains, about the time of the Dassara, gifts in money were presented to all Brahmans. In order to prevent the holy men from receiving more than their share, they were passed into this enclosure, at the gate of which stood a vast cauldron filled with red pigment. Each as he entered was marked with this, and nothing was given till all had gone in. They were then let out one by one, and Rs. 3, 4, or 5 were given to each. On one occasion the Peshwa is said to have lavished £60,000 in this manner. There are several other temples and shrines at the top of the hill.

About 6 m. from Poona is the Khondwa Leper Asylum, managed by the Mission to Lepers in India and the East, with the help of a Board representing the local bodies, under the Collector as *ex officio* President. The Lepers Act of 1898 has been applied to Poona. The asylum accommodates 200 lepers, and was opened in 1909.

Excursions from Poona.

A road runs 73 m. N.E. to Ahmadnagar (see motor trip described in Chap. VI. of *Topee and Turban*, by Lt.-Col. Newell. (John Lane, 1921.)

15 m. N.E. from Poona, along the Ahmadnagar road, is the battle-field of **Koregaon (Corygaum)**. Here

800 of the Company's Bombay sepoy, under Capt. Staunton, kept 25,000 Mahrattas, under the command of the Peshwa himself, in check on 1st January 1818—one of the most notable achievements in the history of the Bombay Army. A monument, erected in 1822, stands in a square enclosure on the right bank of the river Bhima opposite the village. There is an inscription in English on the W. and E. faces, and another in Marathi on the N. face. The 2nd battalion of the 1st Bombay Infantry (now the 2/4th Bombay Grenadiers) and the Poona Auxiliary Horse (now the 17th Poona Horse) took part in the engagement, and the word "Corygaum" is emblazoned on their colours.

40 m. from Poona is the deserted Cantonment of **Sirur** on the Ghod River. It was from this place that Staunton started on his march to Koregaon. There are some interesting tombs in the cemetery. The D.B. is $\frac{1}{2}$ a m. further on.

15 m. S.W. from Poona is **Sinlgarh** (the "Lion Fort"), a place very famous in Mahratta annals, and very interesting on account of its scenery as well as its historic recollections.¹ On the road to it is passed the Kharakwasla reservoir of the Poona waterworks, where excellent sailing and fishing can be had. The pretty bungalow may be occupied with the permission of the P.W.D. (Apply at Poona).

The ascent to Sinlgarh is in part almost perpendicular. Being 4162 ft. above the sea, it is delightfully cool, and the views are beautiful. There are several bungalows here occasionally occupied by summer visitors from Poona. The famous stronghold is intimately associated with the history of Sivaji. It was taken, during the Mahratta War of liberation (February 1670), by

¹ See *Poona and its Battlefields*, by Col. L. W. Shakespear (Macmillan, 1916).

the renowned Tanaji Malusre, the companion in arms of Sivaji. The Mahrattas scaled the precipice in the darkness and surprised the garrison.

"The loss of the assailants was estimated at one-third their number, or upwards of 300 killed or disabled. In the morning 500 gallant Rajputs, together with their commander, were found dead or wounded; a few had concealed themselves and submitted; but several hundreds had chosen the desperate alternative of venturing over the rock, and many were dashed to pieces in the attempt." Tanaji was killed at the head of his men. The fine gateway should be noticed; and the figure of a Mahratta warrior in a small shrine which marks the spot where Tanaji fell. There is also a monument to Tanaji's left hand, which he lost before he received his fatal wound. The story is one of the most popular in Mahratta history.

On the 1st of March 1818 Sinlgarh was taken by the English without loss. The garrison, 1100 men, of whom 400 were Arabs, capitulated, after being shelled for three days, in which time 1400 shells and upwards of 2000 shot were fired into the place.

Purandhar is another hill fort to the S.E., about 17 m. as the crow flies, and 24 m. by road, from Poona. The upper and lower forts are situated more than 300 ft. below the summit, which is 4560 ft. above sea-level, and are protected by a perpendicular scarp. It played a prominent part in the Mahratta wars. A treaty was signed here on 1st March 1776, between the Peshwa and Col. Upton, the envoy of Warren Hastings, who marched across India from Calcutta and back. In March 1818 Purandhar was attacked and taken by the English column under General Pritzler (*Blacker's Mahratta War*, p. 241).

It is still used as a convalescent depot for troops and a sanatorium for summer visitors. District Bungalow (for the use of officials on tour). Panthers are found in the hills and deer and other game in the neighbourhood. The temple "Kedareswar" crowns the summit of the hill.

Poona to Madras.

167 m. from Bombay on the main line to Madras is **Dhond** junction station (R.). A considerable European community of railway servants is located here. The Dhond-Baramati light railway runs S. to Baramati, 28 m.

From this place also the Dhond-Manmad Section of the G.I.P. Ry. runs N. The only place of importance on this line is

51 m. **Ahmadnagar** station, usually called Nagar (R., D.B., Inspn. Bung., pop. 33,139), covering 3 sq. m., and founded in 1490 by Ahmad Nizam Shah Bahri, son of a Brahman of Vijayanagar, the first of the Nizam Shahi dynasty which ruled Ahmadnagar for 100 years. His territory was the only part of the W. coast to which the ravages of Portuguese piracy did not extend. They maintained a friendly intercourse for many years with Ahmadnagar. The power of that State extended over the greater part of Berar and the province of Aurangabad and some districts in Khandesh, Kalyan, and from Bankot to Bassein, in the Konkan. The fort, one of the finest and strongest in India, fell into Akbar's hands in 1600, after sustaining a celebrated siege under Chand Bibi, widow of 'Ali Adil Shah, of Bijapur, the "Noble Queen" of Meadows Taylor's novel. It was taken from the Nizam by the Mahrattas in 1760, after desperate fighting. In 1797 the fort was made over to Scindia by the Peshwa, from whom it was taken by General Wellesley, afterwards Duke of Wellington, on the

12th of August 1803. A tamarind-tree, under which the Duke of Wellington is said to have lunched, used to be pointed out on the S.W. side of the fort. It has been blown down.

The fort is in the centre of the Cantonment, $2\frac{1}{2}$ m. N.E. of the railway station. Close to it are *Christ Church* and a R.C. Church. The *European Barracks* are 1 m. S.E. of it, and the Sepoy Lines and D.B. are N.W. of it. The Cantonment was used during the War for the internment of German prisoners. The gate of the fort towards the Poona road is called the *Máliváda Darwaza*; and just outside it are the graves of two British officers who fell here when the place was stormed in 1803. The town, though flourishing and with good bazars, is now of no architectural interest.

The Emperor Aurangzeb Alamgir died at Ahmadnagar on the 3rd March 1707, at the age of 97, and his body is said to have rested in the walled enclosure known as *Alamgir's Tomb*, prior to its removal to the mausoleum at Aurangabad (p. 75). To the E. of the tomb which faces a mosque, is a white marble Darbar Hall (fine view from the roof). 2 m. from the fort is the *Pariabagh*, or "fairy garden," an old palace of the Nagar Kings, which has nothing attractive beyond historical associations.

Ahmadnagar is the hdqrs. of the 11th Infantry Brigade in the Southern Command with a garrison of one British infantry battalion and one Indian infantry Regt. There are also a large Remount Depot and Stud Farm, an Armoured Motor Centre and a Machine Gun School. Large schools and branch missions are maintained by the S.P.G., the American Mission, and Education Society.

The principal sight near Ahmadnagar is the **Tomb of Salabat Khan**,

commonly called that of **Chand Bibi**, 6 m. to E., on a hill 3080 ft. high. The building is octagonal and of three storeys. Below is the crypt, in which are two tombs. There is no inscription.

The main roads of the District are suitable for motor traffic.

At (146 m.) **Manmad** connection is made with the main line of the G.I.P. Ry. from Bombay to Calcutta (Route 2) and also with the metre-gauge line of the Hyderabad State Ry. to Aurangabad (for Ellora) and Secunderabad (Route 4).

184 m. from Bombay on the main line to Madras is **Diksal** station, 3 m. beyond which the Bhima River is crossed.

234 m. **Kurduwadi Jn.** (R., D.B.). From here the Barsi Light Ry. leads N.E., through Barsi, to (86 m.) Latur, a great cotton and grain centre in H.E.H. the Nizam's dominions, and S. to (32 m.) Pandharpur and (85 m.) Miraj, where it connects with the metre-gauge line of the Madras and S. Mahratta Ry. from Poona to Belgaum and Goa, *via* Londa Junction (Route 27).

Pandharpur (pop. 25,210), on the right bank of the Bhima River, with a very celebrated shrine to Vithoba, an incarnation of Vishnu. Immense crowds of pilgrims visit the temple at certain times, particularly in July, when the Ashadi Fair attracts 150,000 people. A pilgrim tax of as. 4 per head is levied on all pilgrims visiting Pandharpur at the time of the four chief fairs. This tax forms the main source of municipal income. The municipality spends considerable sums on arrangements for the sanitary safety of the town at the time of the fairs. The scene on the Bhima River at the time of the pilgrimage is most animated and interesting. There are eleven

ghats, or landing-places. In the centre of the town, on high ground, stands Vithoba's Temple, inscriptions on which show that portions of it were standing in the 14th century. There are numerous other temples in the town.

283 m. **Sholapur** station (D.B., good), (pop. 119,581), capital of a Collectorate, and formerly protected by a small but strong fort, still in a fair state of preservation. It is of Muhammadan construction, and consists of a double line of lofty battlemented and towered walls, surrounded by a moat. In April 1818 General Munro marched against a body of Baji Rao's infantry, 4500 in number, with thirteen guns, attacked them under the walls of Sholapur, and routed them with great slaughter. The fort, after a short siege, surrendered. The Cantonment lay S.E. of the railway station, and there was once a strong force here, but the troops have been withdrawn.

The city, which lies N.E. of the railway station, presents few objects of interest. It has grown greatly in size and importance owing to the development of the cotton industry. There are four spinning and weaving mills, and one spinning mill.

Sholapur has fifty-two schools, including a Government High School, with 400 pupils. It is the headquarters of the American Marathi Mission, which has several schools and also controls the Leper Asylum.

At about 3 m. N. of the city of Sholapur is the **Ekruk Tank**, 6 m. in length, formed by a modern embankment of earth and rough stones, 1½ m. long, which has been carried across the Adhin River. Three canals from it irrigate the surrounding country. It also supplies the city with its water, brought by pipes and pumped by steam power into reservoirs.

43 m. N. of Sholapur, and 32 m. E. of Barsi (see p. 537) is **Osmanabad**, or Dharaseo, in the Nizam's Dominions. Groups of Jain and Vaishnava caves, which may be assigned to the period from 500 to 650 A.D., lie round the town. At **Tuljapur**, 28 m. from Sholapur and 14 m. from Osmanabad, is the temple of Tulja Bhawani, which is visited by Hindus from all parts of India.

292 m. **Hotgi junction station** (R.). From this point the Madras and S. Mahratta Railway runs S. to **Bijapur** and **Gadag junction** (see Route 29).

323 m. **Dudhni**; the last station in the Bombay Presidency. The line now enters the dominions of the Nizam of Hyderabad.

353 m. **Gulbarga station** (D.B.). Gulbarga was the first capital of the Bahmani Kingdom of the Deccan (1347-1500 A.D.), but was abandoned by Sultan Ahmad Shah Bahmani in 1428 in favour of Bidar (p. 557). It stands in an undulating plain, a somewhat dreary expanse of black soil, relieved by outcrops of limestone and thriving young plantations of trees. A number of houses for the Nizam's officers and public offices have been erected on the *Maidan*, which stretches from the railway station to the city. The old fort in the background, black with age, and the numerous domes with which the plain is dotted, also help to relieve the generally monotonous aspect. The Bahmani Kingdom, which was founded at the close of the reign of the Emperor Muhammad Tughlak Shah of Delhi (1325-1351), dissolved gradually into the five kingdoms of Bijapur, Golconda, Ahmadnagar, Bidar, and Berar, of which the last three came to an end with the 16th century and the first two struggled on against the Mughals till 1660 and 1672.

The outer walls and gateways and most of the old buildings of the Fort are in a very dilapidated condition. The *Citadel*, or *Bala Hissar*, has suffered least: it is a solid block of masonry. On the top of it is a curious old gun, 26 ft. long, and having twenty pairs of iron rings attached to it, by which it used probably to be slung or lifted. Close by, at the S. extremity of the inner fort wall, are the remains of an old Hindu temple.

In the old fort is the **Jami Masjid**, one of the finest old Pathan mosques in India, built in the reign of Firoz Shah. There is a tradition that it was built by a Moorish architect from Cordova as a replica of the great cathedral mosque in that city. According to other authorities, it owes its greatness solely to its own original merit of design. Visitors entering it are expected to take off their boots. According to Fergusson, it measures 216 ft. E. and W. and 176 ft. N. and S., and consequently covers an area of 38,016 sq. ft. Its great peculiarity is that alone of all the great mosques of India the whole area is completely covered over. There is therefore no court, and the solid roof affords protection from the sun to all worshippers, while the light is admitted through the side walls, which are pierced with great arches on all sides except the W. This arrangement is so good both for convenience and architectural effect that it is difficult to understand why it was never afterwards repeated. After four centuries of neglect it is now maintained by the Hyderabad State Archaeological Dept.

The *Talukdar's Court*, the *Judicial Offices*, and the *Treasury* of Gulbarga were formerly located in the grand old **Tombs** in the Eastern quarter of the town. These tombs are huge fortress-like buildings, surmounted by domes 100 ft. high, and are the

burial-places of the Bahmani Kings who reigned here at the end of the 14th century. They are roughly yet strongly built, but with the exception of some handsome stone tracery, which has, unfortunately, been whitewashed, none of them contain exterior ornaments of any kind. The interiors are more elaborately finished.

Some little distance from these tombs is the much venerated shrine or *Dargah* of *Banda Nawaz*, or *Gisu Daraz*, a celebrated saint of the Chishti family (see p. 222), who came to Gulbarga during the reign of Firoz Shah in 1413. The inner shrine is accessible only to Muhammedans, but non-Muslims may enter the courtyard on taking off their shoes. The present structure is said to have been erected in 1640 by one of his descendants during the reign of Mahmud 'Adil Shah. Ahma'd Shah Wali, Firoz Shah's brother, made many valuable presents to the saint, and gave him large *jagirs*, and built him a magnificent college close to the city. Some of his descendants still reside at his tomb. Close by are some buildings, consisting of a sarai of General Afzal Khan, mosque, and college (*Madrasa*), said to have been erected by Aurangzeb, who visited Gulbarga on several occasions. There is also a dome of polished ashlar masonry, built by Chand Bibi (Adil Shahi) as her burial-place; but she died at Bijapur.

In the town is a cross-shaped bazar, 370 ft. by 60 ft., adorned by a row of sixty-one Hindu arches, with a block of buildings at either end.

370 m. **Shahabad station (R.)**, known for its limestone quarries. Large quantities of the stone are exported.

376 m. **Wadi junction station (R.)**. From here the Nizam's State Railway runs E. to Hyderabad, Secunderabad, Kazipet, and

Bezwada (Route 28). Through carriage on the mail train.

427 m. **Krishna station**. Here the railway crosses the Kistna (= Krishna) River by a grand bridge 3854 ft. long.

443 m. **Raichur station (R.)**. At this point the G.I.P. Railway and the Madras and S. Mahratta Railway N.W. Branch Railway meet. Madras is distant 351 m.

Raichur has been incorporated in the Nizam's dominions since 1860. In 1357 it formed part of the dominions of the Bahmani Kings. It was included in the government of Bijapur, and was governed in 1478 by Khwaja Mahmud Gawan. When Bijapur became an independent kingdom Raichur was its first capital. The *Fort* is about 1½ m. from the railway station. The N. gate, flanked by towers, is best worth attention. There is a stone elephant, not quite the natural size, carved out of a boulder about 50 yds. outside the gate. At right angles to this gate is another called the *Kasba Darwaza*. Outside the latter is the door of a tunnel, out of which the garrison could come to close the gate, and then retire by the underground passage into the fort. The W. gate is called the *Sikandaria*, and near it is the old palace, with immensely thick walls—now a jail.

The *Citadel* should be seen for the sake of the fine view, extending as far as the Tungabhadra River, 16 m. to the S., and the Krishna, 12 m. to the N. The ascent commences from near the N. gate. The hill on which it is built consists of immense boulders of rock, and is over 290 ft. high. The path up is broken and unsafe after dark. On the left is a row of cells belonging to the *dargah*, or shrine, and at the E. end, overhanging the precipice, is a stone pavilion. Near this, on the E., is a mosque 18 ft. high; and on the S. side

is a place for a bell or gong 7 ft. high, with stone supports and a stone roof. The whole surface of the top is 70 ft. sq. The town is to the E. of the fort.

461 m. The railway crosses the Tungabhadra River, which forms the boundary between the Nizam's dominions and the Madras Presidency.

486 m. **Adoni station** (Adwani—pop. 30,244). This is one of the principal cotton-marts in the Deccan. The town is of some historical interest. According to tradition, it was founded 3000 years ago by Chandra Singh of Bidar. After the Battle of Talikota in 1565 the Sultan of Bijapur appointed Malik Rahman Khan, an Abyssinian, to govern it, which he did for 39 years, and died there. His tomb on the Talibanda Hill is still an object of religious veneration. He was succeeded by his adopted son, Sidi Mas'aud Khan, who built the lower fort and the fine Jami Masjid. In 1690 Adoni was taken, after a desperate resistance, by one of Aurangzeb's Generals, and afterwards fell to the Nizam. Salabat Jang granted it in *jagir* to Basalat Jang, his younger brother, who made it his capital, and endeavoured to form an independent State. He died in 1782, and was buried at Adoni, and a fine mosque and tomb were erected over his grave and that of his mother. In 1786 the citadel was captured by Tipu Sultan after one month's siege. He demolished the fortifications, and removed the guns and stores to Gooty. In 1792 it was restored to the Nizam, and exchanged by him with the British in 1799 A.D. for other places. The citadel is built on five hills, two of which rise 800 ft. above the plain. Half-way up the rock is a fine tank containing good water, and never dry.

518 m. **Guntakal junction station** (R.). From this junction the main

line continues S.E. to Madras. Metre-gauge lines run S. to Bangalore, N.E. to Guntur and (279 m.) Bezwada, and W. to Bellary, Hospet (for Vijayanagar), Gadag and (160 m.) Hubli (Route 30).

536 m. **Gooty station** (R.). Nearly 2 m. S. of the railway station is its famous hill fortress, first built between 1509 and 1530 on a precipitous mass of bare rock, which towers above the surrounding rocks.

The Fort, which is 989 ft. above the plain, and 2171 ft. above sea-level, is approached by a long, winding, paved pathway, which leads to the summit of the rock. It was the stronghold of Murari Rao, the ally of Clive at Arcot in 1751, and was taken by Hyder 'Ali in 1776, after a siege of nine months. The water failed, and the garrison were forced by thirst to surrender. At the foot of the path leading to the citadel is the English Cemetery, where rested for a short time the body of Sir Thomas Munro, who died at Pattikonda, in Kurnool, on the 6th June 1827. His remains now lie in the fort at Madras, but a cenotaph stands in this cemetery, where there are also other graves of interest. There is a R.H. for Indians in the town, erected by Government to the memory of Sir Thomas Munro.

566 m. **Tadpatri station** (R.). Bus service between Tadpatri and Anantapur. The town was founded during the time of the Vijayanagar Kings, about 1485, when the highly decorative temples of Rameswaraswami and Chintalarayaswami were built. They are about 2 m. from the railway station. The one on the river-bank was never finished, but is the most imposing. Fergusson (*Ind. Arch.*, 1, 403, pictures on pp. 405-6) writes: "The wonders of the place are two gopurams belonging to the second

(the Rameswara), which is now a deserted temple on the banks of the river, about a quarter of a mile from the other. One of these was apparently quite finished; the other on the North never carried higher than the perpendicular part. In almost all the gopurams of India this part is comparatively plain, all the figure-sculpture and ornament being reserved for the upper, or pyramidal, part. In this instance, however, the whole of the perpendicular part is covered with the most elaborate sculpture, cut with exquisite sharpness and precision, in a fine close-grained stone, and produces an effect richer, and on the whole, perhaps, in better taste, than anything else in this style." These two large gopurams are perhaps the finest architectural works executed during the Vijayanagar dynasty.

632 m. from Bombay and 162 m. from Madras, is **Cuddapah** (Kaddapa) station (R.). The town (pop. 19,517) is now the headquarters of the Madras District of that name. It was formerly the capital of the Nawabs of Cuddapah, local Chiefs of some importance in the latter half of the 18th century. Situated between the Mahrattas, the Nizam, and Mysore, they were gradually crushed, and finally were reabsorbed by the Hyderabad State. In 1799 the Cuddapah, Kurnool, and Bellary Districts were ceded to the E.I. Co., and Sir Thomas Munro was appointed the first Collector of all three. Cuddapah town contains the usual municipal buildings, including a R.H. The district is hilly, and has a large area of forests. Places of interest, historical and archaeological, are few, the principal being Gandikota and Siddhavattam Forts, ry. stns, Kondapuram, 17 m. from Tadpatri, and Vontimitta, 14 m. from Cuddapah, respectively. There are R.Hs. at both. The W. taluks are noted

for their ground-nut and cotton crops; while in the Penneru River-bed, near Cuddapah, are grown the melons, for which the district is famous.

Jammalamadugu (R.H., 13 m. from Muddanuru station, 34 m. from Cuddapah), is the headquarters of the London Mission in the ceded districts. Owing to the many broad and unbridged streams in the district the roads are not suited to motor traffic. Persons travelling in the district must make their own arrangements for meals at R.Hs.

710 m. Renigunta station (R.), junction for the metre-gauge M. branch of the M. and S.M. Ry., which runs from Gudur on the line from Madras to Waltair (p. 520) to Katpadi Junction (183 m.).

On the line from Renigunta S.E. to Katpadi are

6 m. Tirupati East station * (D.B.). This town, of 17,434 inhabitants, crowded at all times with pilgrims, is celebrated for one of the most sacred **Hill Pagodas** (Sri Venkateswara Perumal) in S. India; it stands at the top of the "holy hill" called **Tirumala** (part of the Seshachalam range) and is about 8 m. from the railway station. Wooden and brass idols are a speciality of the lower town. A conveyance takes the pilgrim to the foot of the range of hills, where there are two fine gates, from which the ascent is made in a dhooly carried by bearers. There are several gopurams on the ascent visible from below. The antiquity of the temple is indisputable, but its origin is involved in obscurity. The idol is an erect stone figure 7 ft. high, with four arms, representing Vishnu. In the temple at Tirumala are copper statues of the Vijayanagar King Krishnaraya and his two Queens, and of Venkatapatiraya. No European entered Tirumala till 1870, when the Superintendent

of Police, in spite of the remonstrances of the Mahant, went up in search of an escaped forger. Officers of Govt. on duty now visit Tirumala, but with this exception no one but Hindus may enter the area. The Seshachalam range is 2500 ft. high and quite bare, and has seven peaks. On the seventh peak, Sri Venkataramanachellam, is the pagoda, surrounded by a broad belt of mango, tamarind, and sandal trees. In front of it is a Hall of 1000 Pillars, which cannot, however, compare with that at Madura or those at Chidambaram or Conjeeveram. A picturesque stepped way leads from it to the temple gate, which is a fine one; admission to the temple is not granted. E. of the temple is a tank, and a bungalow, belonging to the Mahant, who is trustee, for the accommodation of his guests.

14 m. Chandragiri station. The walled Fort is built on a large rounded mass of granite rising 600 ft. above the valley; it is similar in architecture to the Vellore Fort (p. 608). In the centre is the *Palace* of the Vijayanagar Rajas. After the defeat of Talikota in January 1565 the capital of the Rajas of Vijayanagar was for a time at Penukonda, and was subsequently changed to Chandragiri. It was taken from them by the Golconda Ruler in 1646, and was occupied by the Nawab of Arcot in 1750 and by Hyder 'Ali in 1782. In the palace one of these, Sri Ranga Raya, in 1639, made to the East India Company the original grant of the land on which Fort St George (Madras) was built. The Government carefully preserve the palace, and it is used as an official residence. It is most picturesquely situated in the fort, and at the back of it is a high, rocky hill. The best way to visit it is to drive from Tirupati and join the train at Chandragiri.

32 m. Pakala; junction for a metre-gauge line to (142 m.) Dharmavaram, junction for the Guntakal-Bangalore line (Route 30, p. 592).

51 m. Chittoor; hdqrs. of the district of that name (pop. 17,941); travellers' bungalow $\frac{1}{4}$ m. from station; 24 m. by road from Ranipet (Route 32). Hyder 'Ali died on 7th December 1782 at Narsingh Rayanapet, near Chittoor, where a monument marks the spot. The small square Fort is to the W. of the town; the walls were pulled down in 1801; within are dispensaries. A fine view may be had from Chase's Folly, one of the surrounding hills; a bridle-path, built by the Judge who gives his name to the hill, leads to the summit. There are some remarkable tombs in the old cemetery.

71 m. Katpadi; junction for the S.W. main line of the S. and S.M. Ry. from Madras to Jalarpet, and thence to Bangalore City (Route 32) and by S. Indian Ry. to Erode for Coimbatore and the Malabar coast (Route 35). A metre-gauge line of the same ry. connects Katpadi with Villupuram (Route 36, p. 656).

From Renigunta station the main line to Madras continues S.E. to

751 m. Arkonam junction station (R.). The S.W. branch of the M. and S.M. Ry. to Jalarpet and Bangalore (Route 32) meets the Raichur line at this point, and a branch of the S.I. Ry. runs S. to Conjeeveram and Chingleput (Route 34).

768 m. from Bombay is Trivellore (Tiruvallur) station, 30 m. by road from Madras. There is a large Vaishnava temple here. 4 m. from the station is the site of the old fort of *Tripasore*, which was captured by Sir Eyre Coote in

1781. Tripasore Fort was at one time the station for the East India Company's cadets, and afterwards for pensioners. There is a Travelers' Bungalow, without servants or furniture.

794 m. from Bombay is **Madras** Central station (Route 33).

ROUTE 27.

POONA to GOA by Wathar (for **Mahabaleshwar**), **Satara**, **Miraj** Junction (for **Kolhapur**), **Belgaum**, **Londa** Junction, the **Braganza Ghat**, and **Mormugão**.

The metre-gauge line of the Madras and Southern Mahratta Railway to (245 m.) Belgaum and (277 m.) Londa Junction, for Goa, branches off to the S. from the broad-gauge line of the G.I.P. Ry. to Madras (Route 26), 2 m. E. of **Poona** railway station (see p. 528).

48 m. **Nira** station. The Lloyd Dam at Bhatgar, which is close to this station, forms the source of supply to the Nira canals system. It was inaugurated on the 28th October 1928 by Sir Leslie Wilson, Governor of Bombay, and is the largest dam in the world. The mass of masonry is about $21\frac{1}{2}$ million cubic ft. in volume. Its length is 5333 ft., the area of the lake is $14\frac{1}{2}$ sq. m., and the catchment area is 128 sq. m. The cost of construction was 127 lakhs of rupees (£952,000), a sum which compares favourably with the Aswan Dam in Egypt; the cost in that case was nearly 50 per cent. greater and the volume in cubic ft. is $2\frac{1}{2}$ million less. The value of such works may be appreciated from the fact that the famine in the Bombay Presidency from 1899

to 1902, involved an expenditure of three crores of rupees (£2,250,000) apart from the individual suffering caused. When this and other irrigation schemes have been fully developed, it is estimated that the increased value of the crops raised will amount to six crores (£4,500,000) as against a total capital outlay of twelve crores (£9,000,000).

Passing through three hill ranges, the line next reaches

69 m. **Wathar** station * (R.).

Passengers leave the train here for **Mahabaleshwar**, the principal hill station of the Bombay Presidency, about 40 m. distant by road to the W.

Motors can be had at Wathar by giving notice to the mail contractor at Mahabaleshwar (see Index, "Wathar"). Cars can be hired also direct from Poona. It is a charming drive of about one hour, the first part through rolling country to

20 m. **Wai** (D.B.), one of the most beautiful towns in the Deccan. It is situated on the left bank of the Krishna, which is lined with fine pipal and mango trees, and with handsome flights of stone bathing-ghats. Behind the city rise hills of all the shapes which are peculiar to the mountains in the Deccan. One hill, 4 m. to the N.W., rises very abruptly, and has a hill fort on the top; it is called Pandavgad, according to the tradition that Wai is the Vairatnagar visited by the Pandavas (Introd., p. lxii). The river is lined with handsome temples: the nearest to the D.B. is dedicated to *Ganpati*: the next to *Mahadev*: and one, at some distance, to *Lakshmi*. They form the great charm of this most picturesque spot. The *mandapam*, or canopy, in front of Mahadev's temple, is very light, and a fine specimen of carving in stone. Wai is a spot much famed

in Hindu legend. Here, according to old tradition, the Pandavas spent part of their banishment and performed many great works (Introd., p. lxii). On this account, and likewise because of its proximity to the source of the Krishna River, Wai is a place of great sanctity; and the Sanskrit school established here, was once in much repute.

On leaving Wai the road begins a steep ascent to

28 m. **Panchgani** (two hotels), containing several boarding-schools for the European, Parsi, Hindu and Muhammadan communities. From Panchgani the road descends a little for one-third of a mile; the country round is covered with low jungle and patches of cultivation.

About 1 m. from Mahabaleshwar, the small lake made by the Raja of Satara is passed on the right; it winds picturesquely, and is about 810 yds. long, and not quite 200 yds. broad.

Mahabaleshwar,¹ 40 m. from Wathar station, is the hill station of the Bombay Presidency (founded in 1828 by Sir John Malcolm). There are two seasons—April and May and after the rains from October. From 1st October to 15th June mail motors run daily from Wathar to Mahabaleshwar; and direct from Poona to Mahabaleshwar (most convenient route, 75 m.). There are four leading motor service companies. In the fair season the climate is at all times delightful, especially from October to March. April and May are distinctly hot, with cool nights. In June mists prevail, and a general exodus takes place in order to escape the torrential rains (from 150 in. to 400 in.) which fall till the beginning of October. October is a very pleasant month, and the vegeta-

tion is seen at its best. Christmas is a favourite season, and the climate usually dry and invigorating. The general height of the plateau is from 4000 ft. to 4500 ft., with an abrupt descent to the E. of 2000 ft., and to the W. of from 3000 ft. to 4000 ft. In clear weather the sea can be seen, which is in a direct line only about 30 m. W. The plateau is heavily wooded with evergreen jungle, closely preserved by the Forest Department, but there is an absence of big trees. There are various view-points and places of interest, but the waterfalls will be found distinctly disappointing, except after heavy rains. Orchids and lilies flower in April and May, and ferns and general vegetation are seen at their best in October, in which month butterflies abound.

The two hotels chiefly frequented by European visitors are Frederick's Hotel and the Hotel Russe; there is also a charmingly-situated Club, with residential quarters, and numerous furnished bungalows can be rented for the season. Frederick's Hotel is on the road from Panchgani, overlooking the golf-links and about 500 yards E. of the Club; the Hotel Russe is on the W. of the bazar, about 300 yards S. of the Club. Rooms should be booked well in advance during April and May, when the Government of Bombay is in residence, and the station is crowded.

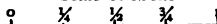
Outside the Club is a lofty obelisk, erected in memory of Lieut.-General Sir Thomas Sidney Beckwith, Commander-in-Chief in Bombay, who died here in 1831. The English church is close by.

The chief view-points and expeditions are Elphinstone Point and Arthur's Seat (fine views of the abrupt descent into the Konkan); Old Mahabaleshwar, with a very sacred and much overrated temple, from which the Krishna is said to rise; Con-

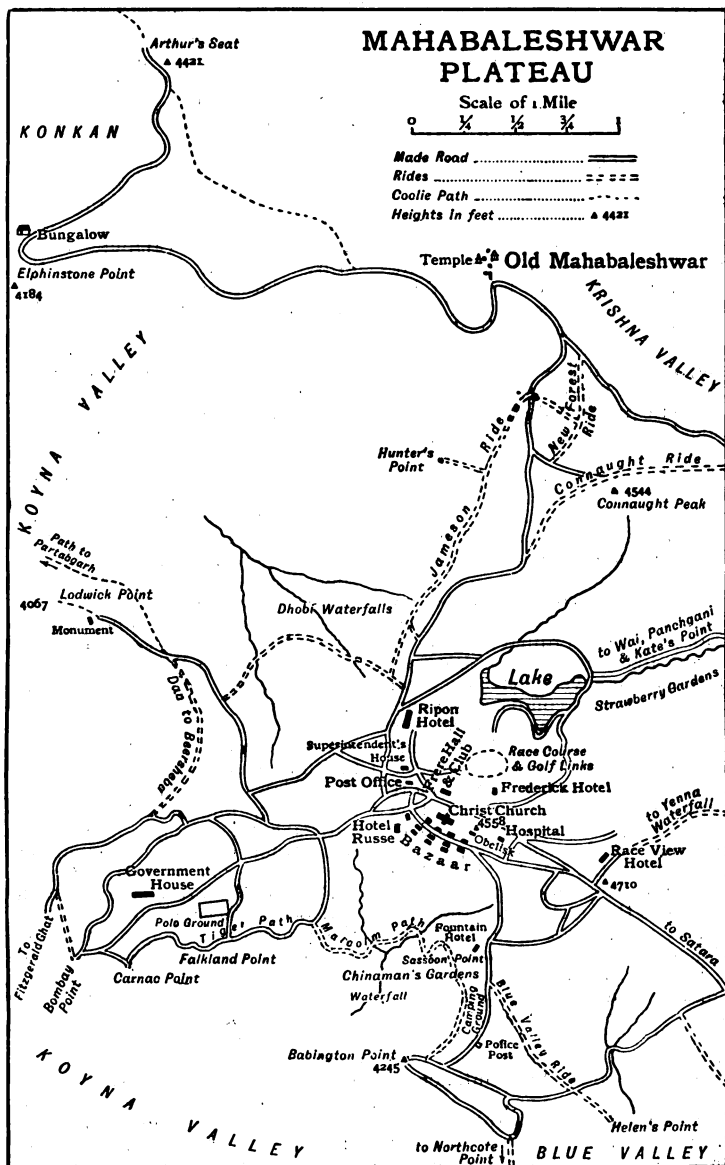
¹ See *Mahabaleshwar*, by D. B. Parasnisi (Bombay, 1916).

MAHABALESHWAR PLATEAU

Scale of 1 Mile



Made Road
 Rides
 Coolie Path
 Heights in feet ▲ 4421



Emery Walker Ltd. scs

naught Peak, with fine view of the Plateau; Lodwick Point, with view of Pratapgad; Bombay Point, with perhaps the finest view of all; Kate's Point, on the road to Panchgani; the Falls of the Yenna to E. and the Dhobi's Waterfall to W. At Lodwick Point is a pillar erected by his son in memory of General Peter Lodwick (1783-1873) of the Bombay army, who "reached this point, alone, in 1827, after hours of toil through the dense forest." An inscription has lately been added, which records the death of a grandson, who went down in the *Persia* on 30th December 1915.

There are excellent walks and rides. Golf, polo, tennis, etc., can be played, and there is a library and reading-room at the Frere Hall, which forms the N.E. half of the club building.

Good vegetables are grown, and in the season strawberries can be had.

Panthers are common, and tigers are occasionally found on the plateau; but the ordinary visitor is hardly likely to get any shooting. The plateau is very extensive, and this hill station compares favourably in this respect with the cramped Himalayan hill stations. Its proximity to the sea makes the climate far cooler and more equable than, from its elevation and latitude, one would be led to suppose. The scenery, especially the view to the W., looking down upon the Konkan or narrow strip between the ghats and the sea, is very impressive, though it lacks the grandeur of the Himalayas.

For local transport, tongas, landaus and victorias are available. Motors are only allowed on the hill under strict regulations, which can be ascertained on application to the Superintendent.

Pratapgad (Partabgarh) (D.B.) is a picturesque hill fort crowning a precipitous rock remarkable as the stronghold of Sivaji and as the

scene of one of the most remarkable events in Indian history — the foundation of the Mahratta empire. A charming drive of about 9 m. down the Fitzgerald ghat on the road to Mahad leads to the foot of the hill, whence a steep path ascends to the gates of the fortress. Chairs are available at the D.B. Sivaji, having in 1656 provoked hostilities with Bijapur, whose army he could not meet in the open, determined to overcome its General, Afzal Khan, by stratagem, and pretending to be in a state of great alarm at the approach of the Bijapur army to besiege Pratapgad, offered to make his submission to Afzal Khan at a personal interview, on condition that the two commanders should meet unarmed, in the midst, between the two armies, with only one armed attendant. They accordingly approached from either side attired in white robes, apparently muslin; but Sivaji wore defensive mail under his robe and turban, and carried concealed in one hand a cruel weapon called a Wághnakh, "the tiger's claws," consisting of four sharp steel claws attached by rings to his fingers. In the very act of embracing the Khan in an attitude of humility, Sivaji drove these claws into him and tore out his vitals, and despatched him with a hidden dagger. His head was struck off and buried under the old tower in the fort. Meanwhile the Mahratta army, which had been concealed in ambush in the jungle, rushed out upon the Bijapur forces and cut them to pieces.

From Wathar station the railway line proceeds to

78 m. **Satara Road station.** From here it is a 10 m. drive by tonga or carriage to **Satara** (2300 ft. high; public motor-cars are always available; D.B.; population 20,045), situated in a hollow between two ranges of hills, which

rise above it on the E. and W. and partly overlap it on the S. The hill on the W. is the termination of a spur from the Mahabaleshwar Hills. From this hill to the city water is conveyed 4 m. in pipes, and there are also two fine tanks. The city has many historic recollections, and the station is one of the most salubrious and pleasant in the Deccan. The *Cantonment* is about $1\frac{1}{4}$ m. from N. to S., and nearly the same from E. to W. In the S. end is the Residency, inhabited by Sir Bartle Frere in 1849, originally built about 1820. Outside the N. gate of the old Residency were the British lines, the Indian lines and Sadr bazar lying N. of them. Troops are no longer stationed here.

The ruling family of Satara was descended from Sahu, the grandson of Sivaji, who was brought up at the Mughal court. Direct descendants died out in 1848 with Raja Shahaji, and the State then lapsed to the British Government.

The *New Palace*, near the centre of the city, was built for Appa Sahib (Raja Shahaji) between 1838 and 1844 by an English engineer, Mr Smith, who also built the bridges over the Vena and Krishna Rivers. On the façade are several mythological pictures, much defaced by the weather. On the W. side of the court is a vast hall—one of the largest in India (83 ft. long, 45 ft. broad). The roof is supported by sixty-four teak pillars, with four more in front. The buildings surrounding the front and main courts are occupied by Executive and Judicial offices. About 200 yds. beyond this is a pretty garden and villa belonging to the sons of Rajarām (never ruled), who was adopted by the late Rani. His surviving son is in possession of the crown jewels of the Satara family and of Jai Bhawani, the famous sword of Sivaji, and his other arms. The sword is 3 ft. 9 in. long in the blade

and the handle is 8 in. long, but so small that an European can hardly get his hand into it.¹ Like most of the famous blades in India, it is of European make, and has the stamp of Genoa. The *Waghnaikh*, or "tiger's claws," described on p. 546, has rings which pass over the first and fourth fingers, but are too small for an European hand. The shield is of rhinoceros hide, and has four stars or bosses of diamonds. The gold casket for holding Sivaji's seal is ornamented with diamonds, rubies, pearls, and emeralds, and there is an inkstand and pen-holder of gold similarly begemmed. The quilted coat which Sivaji is said to have worn when he murdered Afzal Khan may also be seen. It is not lined with chain armour, as is popularly imagined, but is only a cloak of thick quilted silk, which is inconsistent with the appearance of muslin. It is lined with red silk, is richly embroidered with gold, and is very heavy. The dagger is very handsome, and is 18 in. long. In the handle are fine diamonds, emeralds, and rubies.

At the house in Satara, known as "Happy Vale," is the unique collection of pictures, documents, and other relics of the days of the Mahratta empire, which was made by the late Rao Bahadur D. B. Parasnisi. Permission to visit it may be obtained from the Collector of Satara. The bulk of the collection will ultimately be transferred to the Sivaji Memorial Hall at Poona (p. 533).

The **Fort** rises finely on the S. side of the town, and may now be nearly reached by a bridle-path winding up from the Cantonment. The gate of the fort is on the N. side, is of stone, and is very strongly built, with buttresses

¹ There are other weapons at Kolhapur and in the S. Kensington Museum, which claims to be the original Bhawani sword. It is impossible to decide between the rivals, although the balance of probability favours the Satara sword.

40 ft. high. The interior of the fort is now nearly desolate. There are a bungalow and P.W.D. storehouse, with one small temple and the remains of the Raja's palace, subsequently used as a mess-house. The fort is said to have been built by a Raja of Panhala who reigned in 1192.¹ By him, too, were erected the forts of Wairatgad and Pandavgad, near Wai, and Chandan and Wandan, near Satara.

History.—Long before the time of the 'Adil Shahi dynasty at Bijapur the Fort of Satara was used as a State prison, and Sivaji, who captured it in 1673, after a siege of several months, unwittingly furnished for his descendants a prison in which they were for years confined by the Peshwas. In 1698, at the suggestion of Ramchandra Pant, Satara was made the capital of the Mahratta Government. Next year Aurangzeb, with a great army, arrived before the city and pitched his tents on the N. side.² His son, Prince Azam Shah, was on the W. side, at a village since called Shahpur; Shirzi Khan invested the S., and Tarbiyat Khan occupied the E., quarter. Chains of posts between the different camps effectually secured the blockade. The fort was defended by Pryagji Prabhu, hawaldar, who had been reared in the service of Sivaji. As the Mughals advanced he withdrew into the fort, and rolled down huge stones from the rock above, which did great execution. The blockade, however, was complete, and the besieged must have been compelled to surrender had not Parshuram Trimbak, who had thrown himself

into the Fort of Parali, purchased the connivance of 'Azam Shah, and conveyed stores to the besieged. The grand attack was directed against the N.E. angle, which is one of the strongest points, the rock being 42 ft. high, with a bastion on the top of 25 ft. of masonry. Tarbiyat Khan undertook to mine this angle, and at the end of four and a half months had completed two mines. The storming party, confident of success, was formed under the brow of the hill. The Emperor moved out in grand procession to view the attack, and the garrison, crowded to the rampart. The first mine burst several fissures in the rock, and caused a great part of the masonry to fall inwards and crush many of the garrison; but the second and larger mine burst outwards and destroyed upwards of 2000 of the besiegers. Pryagji was buried by the first explosion close to a temple to Bhavani, but was dug out alive. This was regarded by the Mahrattas as a happy omen, and, animated by it, the garrison would have made a prolonged and desperate defence, but provisions fell short, and 'Azam Shah would no longer connive at their introduction. Proposals of surrender were therefore made through him, and the honour of the capture, which he so ill-merited, was not only assigned to him, but the very name of the place, in compliment to him, was changed by the Emperor to 'Azamtara.

In 1705 the fort was retaken by the Mahrattas, through the artifice of a Brahman named Anaji Pant. He ingratiated himself with the Mughals under the character of a mendicant devotee, amusing them with stories and songs, and, being allowed to reside in the fort, introduced a body of Mawalis, and put every man of the garrison to the sword. Satara surrendered to the English in 1818, and Pratap Singh, eldest son of

¹ *Grant Duff*, 1, 26 (edition of 1921). The prince was Bhoj II. (1178-93); he is said to have built fourteen other forts, including Pawangarh and Panhala (p. 550).

² A pillar on the W. of the village of Karanja, about 2½ m. N.E. of Satara fort, and N. of the Poona-Satara Road, marks the site of the Emperor's camp.

Shahu II., was installed as Raja. He held the principality twenty-one years, and, being found guilty of conspiring to massacre the Europeans in the neighbourhood and to establish the Mahratta dynasty, was sent prisoner to Benares in 1839, being succeeded by his brother, Appa Sahib (Shahaji) on whose death without issue, in 1848, the territory was annexed.

Mahuli.—This pretty place, at the confluence of the *Krishna* and *Vena* (*Yena*) Rivers, is about 3 m. E. of Satara, and thoroughly deserves a visit. It is considered a place of great sanctity, and the dead from Satara and the surrounding villages are brought there for cremation. Descending the river, *Kshetra Mahuli* is the name of the village on the opposite (left) bank, built in 1825, and dedicated to Radha Shankar.

On the same side of the river is the temple of *Bholeswar Mahadev*, built in 1742. The next temple is on the same bank, dedicated to Rameswar, and was built in 1700 A.D. Looking from the opposite bank, one is struck with the very fine flight of steps leading up to it from the river-bed. Close to the junction of the rivers, on the W. bank of the Krishna and the N. of the Vena, is the Temple of *Sangameswar Mahadev*, built in 1679. Below it and at the junction of the rivers is a triangular plot of ground, with the *tombs* of a Gosain named *Banshapuri* and his disciples. That of the Gosain is an octagonal building of grey basalt, with open sides surmounted by a low dome. The largest of the temples is on the S. side of the Vena, at its confluence with the Krishna. It is sacred to *Visheswar Mahadev*, and was built in 1735 A.D.

The fine bridge over the Krishna River below the confluence of the rivers, built by Mr Oddin Taylor of the P.W. Dept., was opened in 1915.

84 m. Koregaon. This is *not* the station for the battlefield of Koregaon (Corygaum), which is 15 m. N.E. from Poona and is reached by road from that place (see p. 534).

160 m. Miraj junction station (R., D.B.). Terminus of the Barsi Light Ry. from Kurduwadi and Pandharpur (p. 537). Miraj is the centre of two small Mahratta States—Miraj (senior branch), of which the area is 342 sq. m., and Miraj (junior branch), which covers 196 sq. m. A short line of 8 m. connects Miraj with Sangli, the capital of another Mahratta State (1136 sq. m., with a pop. of 221,321 and an annual revenue of about 12½ lakhs).

A branch line, constructed by the Kolhapur State, runs W. to

29 m. Kolhapur station (pop. 55,594 in 1921), the capital of the important Mahratta State of that name, which has a total area of about 3217 sq. m., with a pop. of 833,726 and a revenue of 91 lakhs. It is celebrated on account of the antiquity of its temples, and is now also distinguished for its fine modern buildings. The Maharaja Lt.-Col. H.H. Shri Sir Rajaram Shahu Chhatrapati Maharaj, G.C.I.E. (born 1897, succeeded 1922; salute 19 guns), traces his descent from the Mahratta hero Sivaji. His title of Chhatrapati (lord of the umbrella or paramount sovereign) was one of those which were assumed by Sivaji at his coronation (1674).

The *New Palace*, between the Residency and the city, was built at a cost of Rs.800,000, and is a very prominent object in the landscape. The *Albert Edward Hospital* was built in commemoration of King Edward's visit to India.

Opposite is the *Town Hall*, situated in the *Public Gardens*. The *High School*, a handsome pile of buildings, is near the Old Palace in the centre of the town, and

fronting it is the *Native General Library*. The *Resident's House* is a handsome building. Close by is *All Saints' Church*, served by the S.P.G. clergy, whose *Mission House* is 300 yds. off, $\frac{1}{2}$ m. S.W. of the Resident's House. The Ladies' Association of the S.P.G. has one school in the town and another in the camp.

A *Nakkar Khana*, or music gallery, forms the entrance to the *Palace Square*. To the right on entering is the *Rajwada*, or *Old Palace*, with a stone gateway in the centre and wooden pillars. On the second storey is a Darbar-room, in which there is a picture of the mausoleum at Florence erected over the spot where the body was cremated of Maharaja Rajaram I., who died there in 1870, on his return from a visit to England. In the third storey is an Armoury, in which are many curious swords, one of which may have belonged to Aurangzeb, for it has in Persian the name 'Alamgir and the date 1012 A.H. There is also a Persian sword given by Sir John Malcolm to the Raja of his time.

Adjoining the Treasury, in the S. face of the square, are other *Government Offices*, and behind them the shrine of *Amba Bai*, the tutelary deity of Kolhapur. The old great bell of the temple was inscribed: "Ave Maria Gratia Plena Dominus Tecum," and must have been obtained from the Portuguese about the year 1739.

N. of the town is a sacred spot, — the *Brahmapuri Hill* — where the Brahmans undergo cremation. About 100 yds. N. of this, close to the Panchganga River, is what is called the *Rani's Garden*, where the bodies of the ruling family are burned.

From this spot is seen a *bridge* over the river, with five arches, finished in 1878 at a cost of £14,000. Beyond Rani's Garden is a massive stone gateway, 20 ft. high, which leads to the *Cenotaph*

of Raja Sambhaji, just opposite the door to that of Sivaji, and more to the left that of Tara-Bai.

Kolhapur was one of the few places in the Bombay Presidency which took part in the disastrous rebellion of 1857. The mutineers, consisting of the 27th Regiment Bombay Infantry, broke open the magazines, stole arms, and carried off public treasure.

Hill Forts of Panhala and Pawangarh.—Before leaving Kolhapur the traveller should pay a visit to Panhala, which lies 12 m. N.W. of the capital. There is an excellent road all the way right into the fort. The last 5 m. are up a steep ascent.

Jotiba's Hill, close to the road, is covered with temples (none of great age). Near the hill are the *Pawala Caves* (of Buddhistic origin; one large hall with fourteen pillars and an irregular *chaitya* cave). The road passes under the scarp of *Pawangarh* fort, which is about 1500 yds. from the E. gate of Panhala. The two main entrances were taken down when the fort was demolished.

The fortress of *Panhala*, 2992 ft. above sea-level, is one of the most interesting in the W. of India. It stands up boldly at the top of a rocky height, and was the stronghold of a Raja in 1192 who reigned over the territory from the Mahadeo Hills, N. of Satara, to the River Hiranyakeshi. It was taken by the Kings of Bijapur, who restored it in 1549; was captured in 1659 by Sivaji, who made some of his most successful expeditions from it; and surrendered to the Mughals in 1690. In 1844 it was stormed and taken by the English. At the *Char Darwaza*, or quadruple gate, is a temple of Maruti; passing on, there is a Muhammadan tomb of granite on the left, converted into a school, and a little farther on, a temple of

Sambhaji on the same side of the road. The **Sivaji Tower** (1600 A.D.) is a conspicuous building of two storeys, facing E. and standing at the brink of a precipice. About $\frac{1}{2}$ m. S.W. of the tower are the stone granaries which enabled **Sivaji** to stand a siege of five months. They are 30 ft. high, 57 ft. broad, and 130 ft. long. At the W. side of the fort is the *Tin Darwaza*, a triple gate handsomely sculptured. To the right, at about 40 yds. distance, is the place where the English breached and stormed the fort in 1844.

From **Miraj** junction the main line continues to

213 m. **Gokak Road station** (R., conveyances available). $3\frac{1}{2}$ m. from here are the falls of the **Ghataprabha River**, known as the **Gokak Falls**. In the rainy season they are very fine, but at other times of the year the volume of water is insignificant. The height of the falls is 176 ft., and the pool below is very deep. Near the falls, on both banks, are groups of old temples. The **Gokak cotton-mills** overlook the falls. The mills of the **Gokak Power Company** are worked by turbines supplied with water from the falls. They are on the right bank of the river, which is crossed at this point by a suspension-bridge. There are the remains of many dolmens S.E. of the village of **Konur**, 1 m. from the falls. The **Gokak Canal**, an important irrigation work, starts from here.

245 m. **Belgaum station** (R., D.B.), a civil and military Cantonment (pop. 46,368), is locally called **Shahpur Belgaum**, from the neighbouring town of **Shahpur**, which lies to the S. It is situated in a plain 2470 ft. above the sea, with low hills in the distance. The fort stands to the E. of the town, which contains nothing of especial interest, and to the E. of the Cantonment. It

is built of stone, is oval in shape, and has earthen ramparts and a ditch. It was taken by **Brigadier-General**, afterwards **Sir, T. Munro**, on the 10th of April 1818.

At 120 yds. distance is the ruined **Nakkar Khana**, or music gallery, and on the left is the fort *Church*, containing memorial tablets to **C. J. Manson, C.S.**, who was murdered near **Nargund** (p. 594) by a band of rebels in the night of the 29th May 1858, and to **Lieutenants W. P. Shakespeare** and **A. P. Campbell**, and **Ensign W. Caldwell**, who all fell in the insurrection of 1845 in the neighbouring States of **Kolhapur** and **Sawantwadi**.

Beyond the **Nakkar Khana** to the E. is a neat, plain mosque, known as the *Masjid-i-Sata*. Over the entrance is an inscription in Persian with a date equivalent to 1519 A.D., the year in which it was built by **Azad Khan**, a famous **Bijapur** captain and governor of **Belgaum**. Farther S. is a *Jain Temple*, built of laterite. There is a low wall at the entrance, along which are carved figures of musicians. The façade has four pillars and two pilasters, all of a very complicated character. The inscription in the old **Kanara** language, beautifully cut on a slab of black porphyry, which once was here and is now in the Museum of the **Bombay-Asiatic Society**, states that **Malikarjuna**, whose descent for three generations is given, built the temple.

The *second Jain Temple* is within the **Commissariat Store Yard**, and is very much finer than that outside. The roof is a most complicated piece of carving, rising in tiers, with eaves about 2 ft. broad, which rest on bar-like corbels from the pillars. The principal entrance faces the N.W., and has one elephant remaining at the side, much mutilated; there is a quadruple pendant in the centre. The niches are shell-shaped. There are four portals, 7 ft. sq. each, and

each with four black basalt pillars. There is no image. Dr Burgess says: "The pillars of the temple are square and massive, but relieved by having all the principal facets, the triangles on the base and neck carved with floral ornamentations. The door leading from the mandapam to the temple has been carved with uncommon care. On the centre of the lintel is a Tirthankar, and above the cornice are four squat human figures. On the neat colonnettes of the jambs are five bands with human groups, in some of which the figures are little more than an inch high, yet in high relief; inside this is a band of rampant *sinhas* (lions), with a sort of high frill round their necks. Outside the colonnettes is a band of *chakwas*, or sacred geese, another of *sinhas*, and then one of human figures, mostly on bended knees."

St Mary's Church stands in the Cantonment N.W. of the town. It was consecrated in 1869. There is a handsome Memorial Cross in the compound to twenty-three sergeants of H.M.'s 64th, who died during the Persian and Indian campaigns, 1856-8.

Shooting passes can be had for Rs.25 from the Conservator of Forests, S.C., Dharwar, for the jungles in the S. of Belgaum District and in the neighbouring District of N. Kanara.

At *Sutkatta*, 14 m. N. from Belgaum, there are two Indian fig-trees of very great size. The first is near the D.B. The stem forms a wall of timber extending 40 ft., and rises to a great height; the branches spread out 100 ft. round the trunk. The other tree is about 1 m. from the bungalow, and though not remarkable for height, covers a larger surface of ground.

277 m. *Londa* junction station (R.). The line to Goa proceeds W.

To the E. a line runs to Hubli Junction and thence to Hospet, Bellary, Guntakal and Bezwada, at the head of the delta of the Krishna River. A third line goes S.E. to Bangalore (Route 31).

On the line to Goa is

293 m. *Castle Rock* station (R.) (1907 ft.). Here, at the frontier of the Portuguese territory of Goa, the S. Mahratta line is joined by the West of India Portuguese Railway, which in 51 m. runs down the Braganza Ghat to Mormugão, the seaport of Goa. In the first 10 m. the line passes through a dozen tunnels, ranging from 150 ft. to 838 ft. in length, which had to be cut almost entirely out of the solid rock. Apart from its commercial importance, the line runs through magnificent scenery.

307 m. *Dudh Sagar* station, or the "sea of milk," where there is a very fine waterfall.

325 m. *Collem*: Portuguese frontier offices.

346 m. *Margao* (Hotel dos Aliados); important town. Motorbus to Panjim, 25 m.; or launch for Panjim may be boarded at Rachol, 10 m. from Margao.

360 m. *Vasco da Gama*. The old port; quaint old-world vessels may be observed in the harbour.

363 m. The terminus of the railway is on the quay at the Port of *Mormugão*, which, as well as the line, is the property of the West of India Portuguese Railway Company, leased to the M. & S.M. Ry. From the stn. a flight of stone steps leads to the Antico Palacio Hotel. There is a fine view from the balcony over the bay towards the headland on the N., under which is Panjim, the capital of Portuguese India. Alternative routes to Panjim and Goa are (1) Launch leaves Mormugão at

8 A.M. for Dona Paula and Panjim : time, $1\frac{1}{2}$ hr. A motor-bus (fare, ans.10) runs from Dona Paula to Panjim. (2) Halt at Sanvordem at 7.49 A.M., and take steamer through inland creeks *viâ* Old Goa, arriving at Panjim at 4 P.M. Return *viâ* Mormugão. (3) Shepherd Co.'s steamer daily from Bombay to Mormugão (time 24 hrs. : fare, Rs.18; food extra). There is a British Consul at Mormugão.

New Goa, * otherwise Panjim (two hotels), contains 9388 inhabitants, and more than half the Indian population are Christian descendants of Hindus converted by the Jesuits and other religious orders. These are the "Goa Boys," so well-known in Bombay and in other parts of India as servants. With Vasco da Gama (1524) there came to Goa members of the Portuguese nobility, whose descendants are the "Doms" of modern Goa. The African slaves imported to wait on their ancestors' households are still represented. Panjim stands on the S. bank of the Mandevi, which is navigable by large vessels as far as Sanvordem. The streets are broad and the squares are ornamented by statues.

A row of handsome buildings lines the quay, including the *Old Fort*, now the Secretariat and formerly the residence of the Governor-General, who removed hither from Old Goa about 1760, and in 1843 made this the seat of government and capital of the Portuguese territory in India. To the S.W. is the *Palace of the Archbishop*, who is Primate of the Roman Catholic Church in India. It contains some life-sized portraits of the Archbishops.

At a short distance to the W. are the *Barracks*, which hold the standing army. In front of them is a statue of Afonso d'Albuquerque (p. 557), the founder of Old Goa, brought from there.

A good road leads from New to Old Goa about 7 m. higher up the valley. (Motors available, Rs.5½ return journey; 3 hrs. should be allowed; lunch to be taken.) The road first crosses a causeway thrown over the swamp to *Ribandar* village. From here coconut plantations and dwelling-houses line the way, which commands a fine view N. across the river to the hilly, wooded country beyond, and includes a conspicuous round hill, crowned by a Church and conventual buildings, upon the river-island of Divar. *En route* are passed the later Archiepiscopal Palace and the Fountain of Banguinim, which used to furnish water to Old Goa.

Old Goa (Velha Goa, "Senhora de todo o Oriente," Camoens, 2, 51) owes its origin to Afonso d'Albuquerque, who at the head of twenty ships and 1200 troops carried by storm a small coast-town of the Bijapur State in 1510 A.D. On this site he founded the Christian city. It rose rapidly into prosperity and importance, and by the middle of the 16th century became the wealthiest city in all India (Goa dourada), the capital¹ and seat of Government of the then vast Portuguese territory, with a population of 200,000—ilha illustrissima de Goa (Camoens). Moreover, it was the first Christian colony in the Indies and the scene of the labours of St Francis Xavier in 1542-52. But decay followed rapidly, first owing to

¹ Goa in its palmy state is admirably described by Captain Marryat in his *Phantom Ship*; in its present state by Graham Sandberg, *Murray's Magazine*, November 1890; by C. Rechhofer in *A Wanderer's Log* (Mills & Boon, 1922); and by J. C. Molony in *A Book of South India* (Methuen, 1926). J. N. Fonseca's *Sketch of the City of Goa* (Bombay, 1878) is full of interesting information. *The Rise of Portuguese Power in India*, by R. S. Whiteway (Westminster, 1899), is an important historical work, but it is out of print.

the attacks of the Dutch, whose fleets blockaded its harbour, and next because its site proved pestilential, and it was deserted by its inhabitants. It is now literally a city of ruins, and is so hidden from view by the foliage of the jungle that the stranger approaches it unawares, and drives into the midst, unconscious that he is traversing streets of ruined, empty dwellings, occupied by cocoanut and other tall trees instead of by human beings.

In the midst of all this ruin Goa remains a city of magnificent churches, four or five ranking as first class and in perfect preservation, though the style of architecture betrays a degraded taste.

The road from Panjim leads past the Arsenal on the left and the hill of the Church of the Rosary on the right into a large central square, named the Pelourinho from the stocks in it, and surrounded by churches and convents. The most important of these and the holiest, because it contains the body of St Francis Xavier, is the Bom (the Good) Jesus, on the right (S.) side, erected in 1594. Its handsome façade runs on into that of another great building with lofty halls and lengthy corridors, all empty, the *Convent of the Jesuits*, which was finished in 1590, thirty-eight years after the death of St Francis, and had the merit of rearing and sending forth over the world an admirable and devoted band of missionaries. The order was suppressed here in 1759, the other monastic orders in 1835, when their property was confiscated to the State. The endowments of the churches, however, have not been forfeited, and the Archbishop and the secular clergy of Goa still receive allowances from Government.

The Church of Bom Jesus may be entered by a side door from the Jesuits' College, passing the

Sacristy, a spacious hall, with wardrobes filled with rich priestly robes. Near it hangs a portrait of St Francis Xavier at the age of 44—a dark face of sweet expression.

The Tomb and Shrine of St Francis Xavier (1696) occupy a side chapel, richly adorned; the walls are lined with pictures illustrating some of the acts of his life. The monument is a stately structure, consisting of three tiers of sarcophagi of costly jasper and marble, and was the gift of a Grand Duke of Tuscany. The upper tier is ornamented with panels curiously wrought in coloured marbles so as to represent scenes in the life of the saint; the whole is surmounted by the silver coffin containing the body, and adorned with reliefs also in silver, and with figures of angels in the same metal supporting a cross. The coffin, weighing 600 marks of silver, is unlocked by three keys, in the keeping of the Governor-General, the Archbishop, and the Administrator of the Convent, and has been frequently opened, disclosing to public view the body, which was long in wonderful preservation, but has now shrunk to a mummy. The body of the saint was translated here from the Sanchão's island, where it was originally buried.

In the body of the church is a solid silver statue of the saint, the gift of Dona Maria, wife of Pedro II. and Queen of Portugal.

250 yds. distant, on the opposite side (N.) of the square, stands the **Cathedral** of St Catherine,¹ built in 1562-1623, the church next in importance to the Bom Jesus, and known as the Se Primaçial. It is 250 ft. long, 180 ft. wide, with façade 116 ft. high, and has a whitewashed inside, with a high altar at the W. end. It alone of all the churches retains a staff of

¹ Goa was recaptured on St Catherine's Day; 25th November.

priests — twenty-eight canons — who perform the service throughout the year. On looking from the terraced roof of the cathedral one cannot but think of the solemn and terrible sights that have been seen in the square below, when the great bell of this church tolled to announce the celebration of an *auto-da-fé*.

N.W. of the cathedral is the *Archbishop's Palace*, a magnificent residence, still occupied occasionally.

W. of the cathedral is the once gorgeous *Church of San Francisco d'Assisi*, the oldest here, having been adapted from a mosque. It was, however, rebuilt 1521, except the porch, which is original, and is in fair repair.

In front of the cathedral stood the *Palace of the Inquisition*, with its dungeons and prisons, established in 1560 and suppressed in 1814, now an overgrown heap of ruins an acre in extent.

S. of the Inquisition, at the N.E. corner of the square, were the buildings of the *Misericórdia*, enclosing the Church of Nossa Senhora de Serra, built by Albuquerque in fulfilment of a vow at sea, and in which he was originally buried. From these the Rua Direita led to the river front and the Viceroy's Palace. The *Arch of the Viceroys*, which still bears the deer crest of Vasco da Gama, stands over the principal landing-place known as the Ribeira dos Vicerays, which extended W. to the Quai of the Galleys (Ribeira dos Galés) and E. to the Customs House (Alfandega) and the Great Bazar. On the Arch is sculptured the figure of a saint; his foot is on the neck of the heathen and the sword in his right hand is pointing towards India. **The Palace is a ruin.**

E. of the Palace and the bazar and about $\frac{1}{4}$ m. N. of the Church of Bom Jesus, is the *Church of St Cajetan*, perhaps the best preserved, built 1665, and sur-

mounted by a dome and by two low towers; the façade is of red laterite, whitewashed. The convent is now the *Museum*, where some curiosities of the olden time are preserved. Beyond lay the convent of the Dominicans, with that of the Carmelites on a hill, and the famous missionary *College of Saint Paul*, or Santa Fé, which is about $\frac{1}{4}$ m. E. from the Bom Jesus. The *autos-da-fé* used to take place in the Campo San Lazaro, near this. At the W. end of the town, near the Arsenal, was the famous *Royal Hospital*, the first established by Europeans in the East.

Portuguese India. — The total population of the Portuguese possessions in India—Goa, Daman and Diu—is under 550,000. The territory of Goa has a coastline of about 65 m., and includes the small island of Anjediva, near Karwar. It is divided into two tracts, known as the Old and New Conquests (Velhas e Novas Conquistas), and these are subdivided into four and seven District charges respectively, at the head of each of which is an Administrator and a Municipal Council. Daman (p. 166) is divided into two such charges, while Diu, an island off the S.E. coast of Kathiawar, constitutes one only; these two are under separate Governors subordinate to the Governor-General, who is also Governor of Goa, as the Governor-General of India was once Governor of Bengal. There is a High Court (Tribunal de Relação) of second instance at Goa, consisting of five judges, which has jurisdiction over Macao and Timor as well as over the Portuguese possessions in India, and a subordinate judge in each District. The military force consists of 1082 (786 being Indians). There are engineering and health Departments. Panjim has a Lyceum, a normal school, a Commercial Institute, and a medical

school; and some 105 primary schools exist in the Goa country. The annual revenue of the Portuguese possessions in India in 1924-25 was 1,846,470 *escudos* (4 *escudos* 50 cents, at par = £1), and the expenditure 1,829,270 *escudos*.

The Padroado, or right of ecclesiastical patronage over the Roman Catholic dioceses in the Bombay Presidency, which has been claimed by the Portuguese Government since the 15th century, by virtue of a Bull of Pope Nicholas V (2nd January 1454) has now been abandoned under an arrangement entered into between the Vatican and Portugal in May 1928.

Afonso d'Albuquerque, the conqueror and founder of Goa, was born in 1453, and was therefore fifty years old when he visited Cochin and Quilon on his first journey to India in 1503. In 1506 he occupied Socotra on behalf of the Portuguese Crown, and in November 1509 he became Governor of the Eastern possessions of that Crown. Panjim was taken and Goa surrendered early in the following year, and the latter was stormed and recovered from the Bijapur troops on 25th November following. During the next two years the Governor was occupied with the affairs of Malacca; in 1513 he attempted to capture Aden, but failed; and in 1514 he caused a fort to be erected at Calicut after the Zamorin had been poisoned. In February 1515 he proceeded to Ormuz and obtained possession of the fort there, and died on his way back from that place to Goa on 18th December 1515. His body was finally transferred to Lisbon, and now rests there in the Church of Nossa Senhora da Graça.¹

¹ See *Albuquerque*, by H. Morse Stephens (Oxford, 1892).

ROUTE 28.

WADI JUNCTION to Bidar, HYDERABAD, Golconda, Secunderabad, Kazipet Junction, Warangal, and Berwada.

H.E.H. the Nizam's State Railway. Through carriages between Bombay and Secunderabad by the Bombay-Madras mail from Victoria Terminus, and *vice versa*, *via* Wadi; fares, Rs. 46-10-0 first-class; Rs. 23-5-0 second-class.

On the main line of the G.I.P. Ry. from Poona to Madras (Route 26) is

376 m. from Bombay, **Wadi junction station** (R.) (see p. 539); the western terminus of the broad-gauge section of H.E.H. the Nizam's Guaranteed State Railway, which runs to (115 m.) Hyderabad and thence to Berwada, where it connects with the Madras and S. Mahratta main line from Calcutta to Madras (Route 25).

10 m. from Wadi, **Chittapur station**.—Extensive silk manufactures. About 1 m. to the S. is **Nagal**, a deserted town, with ruined temples dating from 1050 A.D. In one of them is a life-size bull cut out of a solid block of basalt.

24 m. **Seram station**. A richly-carved temple, of 1200 A.D., dedicated to Siva.

44 m. **Tandur station** (R.). Duck and snipe shooting in the cold weather.

57 m. **Dharur station**; Bidar is 40 m. distant. Railway bungalow, which can be occupied by permission of the Agent, N.G.S. Ry., Hyderabad. The jungle to the S. of the line is a State forest reserve.

Bidar (Travellers' Bungalow), Vidarba. Motor-bus service from Hyderabad to Bidar: 80 m. in

5 hrs. This town was the capital, first of the later Bahmani Kings and then of the separate Barid Shahi dynasty (1492-1609). It is well worth a visit on account of the extremely picturesque walls and defences which still surround it. The fort was built in 1428 by Ahmad Shah Wali, the ninth Bahmani king, who removed here from Gulbarga (p. 538). The fine *madrassa* of Khwaja Mahmud Gawán¹ (built in 1471), resembles those at Samarkand and Bukhara. Nearly the whole of one side has disappeared, and only one of the two minarets remains. The many-coloured encaustic tiles on the façade deserve notice. The tombs of twelve Bahmani Kings are in the village of Ashtur to the N.E. of the town, including that of Humayun the Cruel, known as the Khuni Sultan (1458-1461). The tombs of the Barid Kings are W. of the town. They have all been well preserved by the Archaeological Dept. of Hyderabad State. The industry of Bidar, *Bidri* work, so named from it, of silver and gold inlaid on iron, has been revived at the Govt. Industrial School.

70 m. **Vikarabad** (R.); hdqrs. of the *jagir* (estate) of Nawab Vikar-ul-Umara (Minister from 1893 to 1901). 3 m. from the stn., on the summit of one of the Ananthagiri hills, is a shrine with an image of Vishnu, which is a much frequented place of Hindu pilgrimage: fair in July and November. Vikarabad is 2057 ft. above sea-level and is visited by residents of Hyderabad during the hot season. Refreshment and waiting-rooms at the stn.

88 m. **Shankarapalli**; waiting-rooms at the stn. 2 m. to the W. is the Rajampet State Stud Farm.

100 m. **Lingampalli** station. Travellers' bungalow. Groups of

underground temples are to be seen in the neighbourhood. Hare and partridge shooting in the jungle near the town; also duck and snipe in the tanks. (Permits must be obtained from the Conservator of Forests at Hyderabad.) Soon after this the line is very picturesque, dotted with numerous granite peaks and isolated rocks. This stone belt extends to Bhongir, 28 m. E. of Hyderabad.

5 m. to the N.W. of Lingampalli, on the road from Hyderabad to Bidar, is **Patancheru**, an important centre of Jain worship from the 7th to the 10th centuries A.D. The temples have disappeared, but colossal statues of Mahavira have been found under mounds or below the Brahmanical constructions.

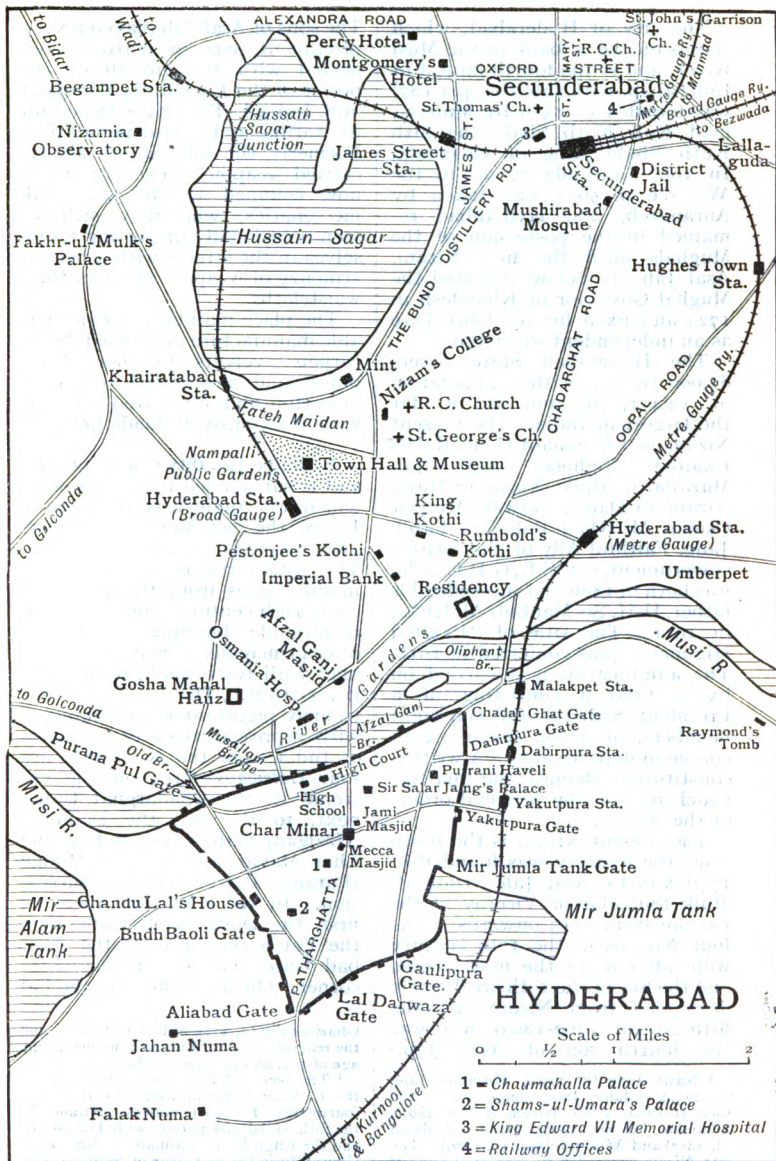
111 m. **Begampet** station (see p. 568).

111½ m. **Husain Sagar Junction** (p. 568). The line turns S. and enters

115 m. **HYDERABAD** station * 1½ m. from the nearest city gate (Afzalganj). The metre-gauge station (pp. 563, 569) is 4 m. away from this, the broad-gauge station. The capital of H.E.H. the Nizam's territory (lat. 17° 22' N., long. 78° 30' E.), 491 m. from Bombay, *viâ* Wadi, about 486 m. from Calcutta *viâ* Bezwada (p. 518), and 490 m. from Madras. The hotels and rly. refreshment-rooms are at Secunderabad, 6 m. further on (p. 568), and visitors are advised to alight at that station.

The Hyderabad State has its own coinage; and, except at Hyderabad and Secunderabad stations, British Indian coins are not received at the rly. stations in the Nizam's dominions. The Osmania or Halli Sicca rupee, which is the unit, stands to the British rupee in the relation of 117 to 100, and is not current in British India.

¹ This Minister, who long upheld the Bahmani dynasty, was unjustly put to death in 1481 by Muhammad Shah III.



The city of Hyderabad, which stands on the S. bank of the Musi River, and is the fourth largest in India (pop. with suburbs, 404,187) was founded in 1589 by Muhammad Kuli Kutb Shah, the fifth Kutb Shahi King of Golconda. In 1687 Golconda (5 m. to the W., see p. 565) was taken by Aurangzeb, and Hyderabad remained in the possession of the Mughals until the first Nizam, Asaf Jah (see below) defeated the Mughal Governor of Khandesh in 1724 and fixed his residence here as an independent sovereign.

The Hyderabad State covers 82,000 sq. m., with a population of 12,471,770, and is by far the largest in India. The present Nizam is Lieutenant-General His Exalted Highness Asaf Jah Muzaffar-ul-Mulk, Nizam-ul-Mulk, Nizam-ud-Daula, Nawab Mir Sir Osman Ali Khan Bahadur, Fateh Jang, Faithful Ally of the British Government, G.C.S.I., G.B.E., who was born in 1886 and succeeded his father, H.H. Sir Mahbub Ali Khan, in 1911. The title of "Exalted Highness" was conferred in 1918. The administration is carried on by a Council consisting of a President (Sadr-i-Azam) and eight members, of whom seven are in charge of departments. A written constitution defines the matters which require the personal orders of the Nizam.

The present Nizam is the tenth since the dynasty was founded in 1740 A.D. by Asaf Jah Nizam-ul-Mulk (Subadar or Viceroy of the Deccan from 1713 onwards); the four Nizams in the 17th century were all sons of the first Nizam, and the five in the 19th are directly descended from Nizam Ali, the fifth Nizam (1762-1803), who was the fourth son of Asaf Jah.¹

¹ Nasir Jang (d. 1750), Muzaffar Jang (d. 1751), Salabat Jang (deposed 1761 and died at Bidar 1762), Nizam Ali (d. 1803), Sikandar Jah (d. 1829), Nasir-ud-daula (d. 1857) and Afzal-ud-daula (d. 1860). The late Nizam succeeded in 1869 at the age of three. Asaf Jah was the son of the first

The sons of Asaf Jah played a very prominent part in matters connected with the growth of the power of the East India Company in S. India.¹ The city is famed for its warlike and varied population. Formerly the inhabitants always carried weapons. The practice is now confined to the old Arab mercenaries, who may still be seen occasionally disporting themselves in the streets with a perfect armoury of weapons stuck in their waistcloths.

The place maintains a considerable manufacture of textile fabrics, carpets, velvets for horse-trappings, and a material composed of cotton and silk. Red earthenware is extensively made here.

In shape the City is a trapezoid, and is surrounded by a stone wall, which was commenced by Mubariz Khan, the last Mughal governor, and completed by the first Nizam. The total area is 2 sq. m.; it mainly dates from the 18th and early 19th centuries, but has some remarkable buildings, which it owes principally to Sultan Muhammad Kuli Kutb Shah, its founder (1581-1612). The *bazars* are extremely picturesque and thronged with representatives of all parts of India. On the N.W. side are four *Gateways*—viz., on the extreme E. the Chadarghat Gate; next, to the W., the Delhi or Afzalganj Gate; then follow the Char Mahal, and the Old Bridge (Purana Pul) Gates in succession. In the S.W. side there is, first, the Dudh Baoli Gate, then the Fateh Darwaza and the 'Alia-bad Gate, which is in the S.W. corner. On the S. side are the Lal

Ghazi-ud-din (p. 303), Subadar of Berar, and the real conqueror of Bijapur; he died at the age of 104, and is buried at Rauza (p. 75).

¹ The second Nizam owed his throne to the E. India Company, and the third and fourth were French nominees. Nizam Ali, the fifth, sided alternately, with Haidar Ali and the English, but ultimately joined Lord Cornwallis in the first siege of Seringapatam in 1792.

Darwaza and the Gaulipura Gate ; and on the E. are the Mir Jumla, Yakutpura, and Dabirpura Gates.

The Musi River, on the N. side, is crossed by four *Bridges*. Farthest to the E. is the Oliphant Bridge, which was erected in 1831 by Colonel James Oliphant, of the Madras Engineers, afterwards (1844-56) a Director of the E. India Company and Chairman of the Court in 1854. The next bridge to the W. is the Afzalganj Bridge, which leads to the broad-gauge railway station. Beyond it are the Musallam (also called the Muslim Jang) Bridge, built in 1898 A.D. by the late Nawab Laik-ud-daula, and the Old Bridge; the two last were the only ones which withstood the terrible flood of 1908. This flood caused the loss of over 3000 lives and the destruction of 24,000 houses. The Char Mahal Gate is slightly to the N. of the Musallam Bridge.

The road from the broad-gauge railway station crosses the river by the Afzalganj Bridge and enters the city by the gate of that name. To the W. of the Afzalganj Gate are the High Court and the *Osmania City College*. The site of the Champa Gate, which was recently demolished, is marked by a few steps near the High Court. Facing these buildings, and on the opposite bank of the Musi are the *River Gardens* and the *Osmania General Hospital*, built in the Indo-Saracenic style. Adjoining the hospital on the N. is the *Afzalganj Masjid* (Mosque), a fine building with four lofty minarets. On the other side of the road is the *Victoria Zenana Hospital* for women, the foundation-stone of which was laid by H.M. Queen Mary, then Princess of Wales, in 1906. The establishment can be inspected by ladies only.

The *Osmania University* is located temporarily in rented buildings near the Afzal Gate; new buildings are to be constructed on a site about 4 m. away, which will

cover an area of about 2 m. A sum of 70 lakhs has been set apart for the purpose in the Budget. The University, which was founded in September 1918 and is named after the present Nizam, employs the Urdu language as the medium of instruction, but a knowledge of English is compulsory. The number of students is about 700, two-thirds of them being Muhammadans. There are Faculties in Arts, Science, Law and Theology, and arrangements are in progress to open Faculties in Medicine, Agriculture, Technology and Engineering.

A broad street, known as *Patharghati*, or the Stone Causeway, runs through the city from the Afzalganj Gate to the 'Aliabad Gate. At the junction of four roads, and about $\frac{1}{2}$ mile from the Afzalganj Gate, is a stately rectangular building with four minarets, hence called the **Char Minar**, 186 ft. high and 100 ft. wide on each side; it was built in 1591 and is a masterpiece of the Kutb Shahi period. Just before reaching it the road passes under an arch called the *Machhli Kaman*, or "Arch of the Fish," the fish being a badge of high rank. There are four arches (*Char Kaman*) 50 ft. high across the streets, one to each quarter of the compass. The style is simple in outline, but vigorous in execution. A little to the W. of the Char Minar is the *Mecca Masjid*, the principal mosque in the city; the gateway was completed by Aurangzeb in 1692. It is a grand but sombre building, with four minars and five arches in front, occupying one side of the paved quadrangle 360 ft. square—date, 1614 A.D. In the quadrangle are the graves of all the Nizams from the time of Nizam Ali (d. 1803). On the E. of the main road, a narrow lane leads to the *Jami Masjid*, erected in 1598 A.D. by Sultan Muhammad Kuli. The mosque is without architectural

pretensions, but is the oldest in Hyderabad.

The **Chaumahala Palace** lies to the south of the Char Minar, $2\frac{1}{2}$ m. from the Residency; from the Chauk a fine gateway leads to a large quadrangle. At the S.W. corner of this a narrow road leads into a second quadrangle; a passage from the S.W. corner of this leads into a third quadrangle, beyond which are the ladies' apartments (*zenana*). The buildings on each side are handsome, and resemble the Shah's Palace at Teheran, but are finer.

In a side street 200 yds. beyond the Palace is the *baradari*, in which the well-known Maharaja Chandu Lal, who ruled Hyderabad as Peshkar (Minister) from 1806 to 1843, died in 1843. It is a low but highly-ornamented Hindu house.

Near the W. wall of the city is the vast palace or *baradari* built by Nawab Togh Jang, the first Shams-ul-umara, who died in 1786. It covers a large space, is handsomely furnished, and contains a gigantic suit of armour and sword belonging to Togh Jang, whose stature is said to have been 6 ft. 6 in.

The *Jahannuma*, also built by the Shams-ul-umara, in a suburb of the same name outside the 'Aliabad Gate, is reached by a good road. This is the old Portuguese quarter of the city; services are still held in a chapel which dates from the end of the 17th century.

Near the Afzal Gate and a few hundred yards on the left is the *Palace of the late Sir Salar Jang*, G.C.S.I., whose able administration of the State from 1853 to 1883 is a matter of history. The great drawing-room contains a number of portraits of former Residents and other distinguished personages. Close to it is the Chini Khana, about 14 ft. square and 12 ft. high, covered with china cemented to the walls. Within the

same enclosure are Sir Salar Jang's *baradari* and *Lakkar Kot* (wooden palace). On the opposite side of the road is the '*Ashur Khana*, which is well worth a visit. The original part of the building, which consists of a hall, was built by Muhammad Kuli Kutb Shah in 1597. The walls are adorned with Persian enamels, which are extremely rich in colour and compare favourably with the best work at Multan and Lahore.

In the N.E. quarter of the city, between the Yakutpura Gate and the Dabirpura Gate, is the **Purani Haveli**, or old Palace, which was built by Asaf Jah, the first Nizam. It is on the road leading from the Chadar Ghat Gate to the Gaulipura Gate. About 200 yards to the N.W. is the *Darus-Shafa* or hospital, which was built by Sultan Kuli Kutb Shah, and consists of a paved quadrangular courtyard surrounded by chambers; it is no longer used as a hospital. Opposite the entrance is a mosque, which was erected at the same time.

The **Residency** can be approached from the city through the Chadar Ghat Gate and across the Oliphant Bridge. It stands about $1\frac{1}{4}$ m. S.W. of the broad-gauge stn., and N.E. of the city, in the suburb of Chadarghat, and is surrounded by a bazar over which the Resident exercises jurisdiction, extending over an area of $\frac{1}{2}$ sq. m. and containing 20,000 inhabitants. The grounds are spacious and full of grand old trees, and are enclosed by a wall, which was strengthened by Colonel Davidson after the attack upon the Residency on the morning of 17th July 1857. That attack was made by a band of Rohillas and others, and was repulsed by the troops at the Residency under Major Briggs, Military Secretary. The bastions commanding the approaches were erected then.

On the site of the Residency

there was formerly a villa belonging to a favourite of Nizam 'Ali, and in it Sir John Kennaway, who was appointed Resident in 1788, was received. The present Residency was built 1803-8. The design was planned by Lieut. S. Russell, of the Madras Engineers, a son of John Russell, R.A., the artist (1744-1806), and the building was entirely constructed by Indian workmen. The N. front, with the Grand Entrance, looks away from the Musi River and the city. A flight of 22 wide granite steps, flanked on either side by a colossal lion, leads up to a portico, 60 ft. long, and 26 ft. broad. Six Corinthian columns support the roof. The Darbar Hall measures 60 ft. in length and 33 ft. in breadth, and is 50 ft. high; some of the furniture came from the Pavilion at Brighton. To the W. and E. are the private apartments. Among the trees are four enormous specimens of the *Ficus indica*, the trunk of one measuring 30 ft. round. There is also a very gigantic tamarind-tree. The park (which is not open to the public) contains an obelisk raised to the memory of Lieutenant William John Darby, who was killed in 1815 within the city of Hyderabad, while gallantly leading the Grenadiers in a charge against some rebels. In a small cemetery behind the Residency are the graves of four Residents—G. A. Bushby (1836), Major John Cameron (1838), A. A. Roberts (1868) and Sir Alexander Pinhey (1916); and also of Sir William Rumbold, Bart. (1833) and his brother George (1820), members of the firm of Palmer & Co.

Within the Residency Bazar is the **Pestonji Kothi** (also known as the Kothi of Raja Narsingh Gir), a large building erected on a high stone basement by the famous Parsi bankers, Pestonji & Co., who farmed the revenues of Berar from 1839-45. Close to the Kothi

are the Imperial Bank, the **King Kothi**, in which the present Nizam resides (not open to the public), and St George's School and Church. To the S.E. of the King Kothi is an old building, known as Rumbold's Kothi. On the roadside, not far from the Bank, is the remarkable tomb (built in Muhammadan fashion) of William Palmer (1867), who was styled "King" Palmer, and was the head of the banking firm bearing his name.¹ N. of the church are the *Nizam's College*, an institution which prepares for the degree examinations of Madras University, and the Roman Catholic Chapel, a two-storeyed building standing on the summit of a hill and commanding an extensive view. Near the chapel is one of the old French gun-foundries erected by M. Raymond (p. 565). It is not unlike an immense racket court.

The metre-gauge railway station (for Bangalore) can be reached from the broad-gauge station by a road which runs E. past the King Kothi, and connects with the road which runs N. from the Old Bridge to Secunderabad station past the Afzalganj mosque. On the W. of this main road and about 1 m. S. of Secunderabad station is the *Mushirabad mosque*, a typical building of the Kutb Shahi style, with slender minarets and lavishly decorated with cut-plaster work.

To the S. of the city, standing on a hill, is the *Falaknuma Palace* of His Highness the Nizam, which is considered the finest in India. It was built as a private residence by the late Minister, Sir Vikar-ul-umara, and was purchased in 1897 by the late Nizam for the sum of 35 lakhs. It is not open to the public, but application to view

¹ He was a son of General William Palmer, who was military secretary to Warren Hastings and Bibi Faiz Bakhsh, a Begum of Oudh. His daughter married Col. Philip Meadows Taylor, C.S.I., the author of *The Confessions of a Thug*, who was in the Nizam's service.

may be made to the Aide-de-camp in waiting, at the King Kothi. Passes are *not* obtainable through the Residency at Hyderabad. The approach is by a beautifully-constructed hill road, at the end of which is an imposing gateway. The Palace stands on a terrace, the front part of which is artistically laid out in flower-beds in the English style. The façade is Grecian, the cornice resting on a double row of Corinthian columns. The handsome vestibule, the walls of which are beautifully painted, is fitted with marble seats surrounding a marble fountain. The vestibule leads into the waiting-room, adjoining which are the Library and Council Chamber. The staircase to the upper floor is of marble, with beautifully-carved balustrades, supporting at intervals marble figures with candelabra. On the walls are oil paintings of His Exalted Highness the Nizam and past Residents and other notable personages of the State. The Reception-room is decorated and furnished in Louis XIV. style. The Ball-room, the Dining-room, the Smoking-room, and bedrooms are all artistically furnished. From the upper floor a fine view can be obtained of the city, the Mir 'Alam Tank, and the surrounding country. Since it came into the possession of the Nizam the Palace has been provided with electric installation, and a wing has been built, unfortunately in a style out of harmony with the original design, as a Museum of Indian Industries.

There is no Jewel-house to be seen at Hyderabad, as in many State capitals in Rajputana, and enquiries upon the subject at the Residency are therefore unnecessary.

Between the Purana Pul and Dudh Baoli Gates is a road leading W. out of the city, through the Khirki-i-Bawahir (a postern) to the *Mir 'Alam Tank*, a lake 8 m.

round. The embankment is formed of twenty-one arches, side by side, presenting their convex surfaces to the pressure of the water. It is 1120 yds. long, and was built by French engineers at a cost of £80,000. It was commenced by Mir 'Alam, the great Minister of the Nizam, who led his master's forces during the war with Tipu Sultan in 1799, the prize-money which fell to his share after the fall of Seringapatam being used for the construction. The embankment was, however, completed in 1811 by his son-in-law, Munir-ul-Mulk (1809-32), the father of Sir Salar Jung I. At the extreme W. end of the lake, which has picturesque coves and windings, is a wooded hill about 80 ft. high, surmounted by a building which is the *Dargah*, or shrine, of *Mir Mahmud*. This is a beautiful structure and well placed, looking down on the waters of the lake that ripple at the foot of the cliff on which it stands. It is small but symmetrical, and was once covered with blue tiles.

The *Gosha Mahal Hauz*, 1 m. to the N. of the city, is a large cistern with pleasure grounds attached for the use of the ladies of the zenana; the palace which was erected by Abul Hasan, the last King of Golconda, is used for public ceremonies; it contains some fine old armour.

To the N.W. of the broad-gauge railway station are the *Nampalli Public Gardens*, covering an extensive area, and surrounded by a high wall castellated with two lofty gateways. In addition to rare plants and well-laid-out beds of flowers, the *Gardens* contain an *Archæological Museum* of great interest, a menagerie and an Industrial Exhibition. The Museum is located in the same building as the *Town Hall*, which commemorates the anniversary of the fortieth birthday of the late Nizam.

Outside the gardens to the N.

is a picturesque Black Rock—the *Naubat Pahar* or “Band Rock”—so called from the fact that in olden times all official communications of the Mughal Emperors with Nizams were proclaimed from this rock to the sound of music. N. of the gardens is the Saifabad Cantonment of the Nizam's regular troops. On the *Fateh Maidan* are a race-course and a polo-ground. The quarters of the Nizam's *African Cavalry Guards* are to the S.W. on the Golconda Road.

EXCURSIONS FROM HYDERABAD.

(1) **The Tomb of M. Raymond.** This lies in Sarur Nagar (Pleasure Town), 2 m. from the Oliphant Bridge to the S.E. of the city, and stands at the end of a terrace 180 ft. long by 85 ft. broad, on an eminence known as Myseram Tekri, or Monsieur Raymond's Hill. The tomb consists of an obelisk of grey stone, 25 ft. high, with simply the letters “J. R.” on each side, placed on a spacious platform. In front of the tomb is a small flat-roofed building, supported on a number of small pillars, and open at the sides. No date is recorded; but the gallant Frenchman, who is commemorated, died on 25th March 1798. At the time of his death he had 15,000 well-disciplined troops at his command, and possessed more power than the British Resident. On 20th October 1798, the whole force was disbanded as the result of a treaty concluded with the Nizam by the British Resident, Col. James Achilles Kirkpatrick. The view from the summit of the platform is one of the most charming about Hyderabad. The tomb and platform are illuminated on the anniversary of Raymond's death, and a large fair is held. One of the regiments in the Nizam's service is still known as the Myseram Risala.

(2) **GOLCONDA.** The Fort and Tombs lie 5 m. W. of the city, lat. $17^{\circ} 22' N.$; long. $78^{\circ} 26' 30'' E.$ For permission to visit the fort application must be made in writing at least two days before the proposed visit to the Under Secretary to the Resident at Hyderabad. Passes are only granted in approved cases, and in no case to large parties. The road from Hyderabad leaves the city by the Purana Pul Gate and crosses the Old Bridge. Golconda was the capital of the Kutb Shahi kingdom,¹ the third great Muhammadan dynasty of the Deccan, which lasted from 1507 to 1687, till overthrown by the Emperor Aurangzeb. The Fort² is surrounded by a strongly built crenellated stone wall or curtain, a little over 3 m. in circumference, with eighty-seven bastions at the angles, on which there are still some of the old Kutb Shahi guns. The walls and bastions are built of solid blocks of granite, many of which weigh considerably over a ton. The moat which surrounds the outer wall is filled up in many places. The fort originally had eight gates, but of these only the Banjara and Fateh (by it Prince Muazzam entered, leading his troops), the Mecca and Jamali are now in use. It was besieged by Aurangzeb, while Viceroy of the Deccan, in treacherous concert with the Minister Mir Jumla, and was taken by him, as Emperor, after a desperate defence of eight months by the last King, Abul Hasan, Abdur Razzak Khan Lari being the hero of the siege. When the first of the Nizams took possession of the place he added a new wall to the fortifications on the E., so as to include a small hill

¹ This kingdom included all the country from Golconda in the west to the east sea-coast from Orissa to the Krishna. For a detailed account of it, see Major (now Sir Wolseley) Haig's *Historic Landmarks of the Deccan*.

² See *Golconda Fort*, by Lieut. G. Moinuddin, 1925.

formerly situated outside the fort. The large sheet of water in front of this portion of the fort is styled the *Langar Talao*.

The *Banjara Gate* is a massive structure of granite, some 50 ft. high, with platforms and chambers on either side for the guards, and a pair of high teakwood gates studded with iron wrought into various fanciful devices and huge sharp-pointed iron spikes, which were intended to prevent elephants from battering them in. The road from here passes straight through the fort to the gate on the N.W. side. A short distance from the gate is a large stone cistern said to have been built by Ibrahim Kutb Shah, which is connected with a tank some distance off by a line of underground pipes. The old buildings inside the Fort are more or less in a ruined condition and it is difficult to identify many of them. The Nau Mahal is comparatively a modern structure built by the earlier Nizams. It is surrounded by a high wall and stands in the midst of a pleasant garden of orange and other fruit trees.

Beyond the Nau Mahal there is a lofty granite structure, said to have been used as a Nakkar Khana (Music Gallery), which forms the entrance to the first line of the Bala Hissar or citadel fortification. A little to the right of this is the Jami Masjid, a small building, the roof of which is supported on five rows of arches about 12 ft. high. An Arabic inscription over the gateway states that it was erected by Sultan Kuli Kutb Shah (1512-43). The Bala Hissar is on the summit of the hill enclosed by several tiers of fortifications. Passing through the gateway on the left side are the remains of the Sila-Khana (*Armoury*) and the Zenana palaces. Parts of the old Water-wheels are still discernible; these rose in two tiers and were designed to bring the water from ground level to the top of the

Armoury, which is on a crag, several hundred feet above. The ascent to the summit is accomplished by a series of roughly paved steps. Half-way up is a large well from which the garrison used to get its water-supply. A short distance from here are the ruins of the Ambar Khana, or King's Stores. A slab of black basalt, which has fallen from its position over the entrance, contains a Persian inscription to the effect that the Ambar Khana was built during the reign of Abdullah Kutb Shah. The N. portion of the ground enclosed by the wall has very few ruins upon it, although it was at one time most thickly populated; indeed, the ground inside the walls is said to have been so valuable that it used to sell for one ashrafi (Rs.20) per yard. The E. and S. portions are strewn with the ruins of palaces, mosques, and the dwelling-houses of the nobles and retainers of the Kutb Shahi Kings. Inside the Fateh Gate are two buildings constructed by the French as arsenals. Farther on are the Kiladar's (Commandant's) House and the Mubariz-ud-daula Palace, and to the S. of these two large enclosures with underground galleries, which probably served as magazines. In front of the citadel, which rises finely some 350 ft. above the rest of the fort, is a triumphal arch. The paved path leads up through various gateways, and under many picturesque half-ruined defences, to the summit of the citadel, on which are the remains of a lofty palace, the two-storeyed Baradari, affording a splendid view of all the country round; on the roof is a stone throne. The upper storey has a spacious hall with side rooms and a large courtyard in front.

The Kings' Tombs. About 600 yds. to the N.W. of the fort stand on the plain the tombs of the Kutb Shahi Kings, who reigned for 180 years in Golconda (1507-1687).

They are reached from the fort and citadel by turning N. from the entrance to the latter and passing a fine stone tank to the N.W. corner of the former. The tombs were repaired at the instance of the late Sir Salar Jang I, when the gardens which had formerly existed around some of them were also replanted and the whole enclosed by a substantial stone wall: pleasant walks with fine shade and fruit trees to each tomb have been laid out. The tombs standing within the garden enclosures are those of: (1) Sultan Kuli Kutb Shah, 1512-43; (2) Jamshaid Kutb Shah, 1543-50; (3) Ibrahim Kutb Shah, 1550-80; (4) Princess Hayat Bakhsh Begam, daughter of (3), 1617; (5) Muhammad Kuli Kutb Shah, 1580-1612; and (6) Muhammad Kutb Shah, 1612-26. Beside these the gardens enclose a large number of minor tombs and mosques. Muhammad Kuli Kutb Shah, who died in 1020 A.H. = 1612 A.D., was the king who founded the city of Hyderabad, and erected many public edifices and Palaces, and his is the finest of the tombs, being 168 ft. high from the basement to the summit of the dome. Beyond this is the tomb of Ibrahim Kuli Kutb Shah, the fourth King, who died in 988 A.H. = 1580 A.D. To the S. of it is the tomb of Sultan Muhammad Amin, King Ibrahim's youngest son, who died in 1004 A.H. = 1595 A.D. A short distance from here in a N. direction is the tomb of Kulsum Begam, and close to it is that of the first of the Kutb Shahi Kings, Sultan Kuli Kutb, who was murdered at the instigation of his son Jamshaid in 1543 A.D. (950 A.H.) at the age of ninety. Between the walled enclosure and the fort walls is the tomb of Abdulla Kutb Shah, who died in 1083 A.H. = 1672 A.D., after a reign of forty-eight years. This is one of the finest tombs here, being enriched with very fine carvings and minarets at each corner of the platform.

The last of the Kutb Shahi Kings, Abul Hasan, who was sent off by his imperial captor to end his days in the fortress of Daulatabad, and died there in 1704, is the only one not interred here.

The general plan of the tombs at Golconda is a dome standing upon a square base, which is surrounded by an arcade of pointed arches. The arcade is single-storied in the case of the smaller tombs; in the larger tombs it is doubled. It rests upon a raised quadrangular terrace of cut stone, which is ascended by four flights of steps. The prevailing colour is white, in some cases picked out with green. Each large tomb has its mosque or musalla (chapel), usually a hall or a hall-porch opening eastward, with a *mihrab* to the west, and flanked by minarets on either side. The interiors are laid out with intersecting arches of great variety. Flights of stairs lead to the unbalconied galleries above, and down to the graves contained in the arches and alcoved basements. The tombs are of black basalt or greenstone. The shape is oblong and stepped with six or eight slabs diminishing above. The top is either *bombé* or flat, and the sides bear mortuary and devotional inscriptions in *Naskh* and *Nasta 'alikh* characters. At one time the walls and cupolas of the principal tombs were decorated with glazed tiles; fragments of these can be traced.¹

The return to Hyderabad may be made by the N. road, passing at 1 m. to the N.W. the *Baradari* and *Masjid of Bhagmati* (after whom Hyderabad was first called Bhagnagar), a favourite mistress of the Kutb Shahi King, Muhammad Kuli. On all sides rise masses of granite, gneiss, and low hills, taking from weather wear the most fantastic shapes,

¹ For a full description, see the *Annual Report* for 1926-27 of Mr G. Yazdani, Director of Archaeology, Hyderabad State.

and sometimes appearing like subsidiary forts erected by the hand of man. The popular legend as regards the peculiarity of their position and appearance is that the Creator after finishing the construction of the world threw away the surplus material here.

The *diamonds* of Golconda, which have become proverbial, were cut and polished here, but came principally from *Purtial*, on the S.E. frontier of the 'Nizam's territory, and Kollur, in the Krishna District. The supply is now exhausted.

On leaving Hyderabad (broad-gauge) station, the train returns to Husain Sagar junction (p. 558) and, turning to the E. past the N. edge of the Husain Sagar tank, enters

121 m. from Wadi Jn., **Secunderabad junction (R.)**, * 5½ m. N. of the Hyderabad Residency. Secunderabad is named after the Nizam Sikandar Jah (1803-29). It is one of the largest British Cantonments in India, covering 19 sq. m., and standing 1830 ft. above sea-level, and is the headquarters of an Infantry Brigade, with a Cavalry Brigade, at Bolarum. Excellent roads connect Hyderabad, Secunderabad and Bolarum.

The main road from Hyderabad to the junction stn. passes along the E. edge of the *Husain Sagar*, a fine lake about 11 m. in circumference, said to have been constructed by Ibrahim Kutb Shah (16th century). The principal feeder is a channel 36 m. long, which runs from the Musi River above Hyderabad. The lake used to form the main water supply of Hyderabad, Chadarghat, and Residency limits; but water is now distributed from the Osman Sagar at Gandipet, 11 m. W. of Hyderabad; the Himayat Sagar is another artificial lake constructed to the S. of it. The view across the Husain Sagar from this main road, which is built on the bund

(1 m. long), is most picturesque. At the N. or Secunderabad end of the bund is a *Boat Club*. On the S. bank of the lake stands the Saifabad Palace, a large and extensive modern building, formerly used as a suburban residence of H.E.H. the Nizam, but now utilised for the Mint and other public offices. This building opens on the Saifabad Road by an elaborate and imposing iron gateway. S. of this is the Fateh Maidan (p. 565).

Another road, running along the W. bank of the Husain Sagar Lake, is of somewhat later construction. It passes through the popular suburb of Khairatabad, where most of the State officials reside (stn. on the line from Hyderabad to Husain Sagar junction), and leaving the Bidar Road just past the residence of the Nawab Fakhr-ul-mulk on a hill to the W., skirts the W. bank of the lake, rising to a height of over 20 ft. above the water. Some fine private houses dot the road on both sides. The Observatory is on the W. At the point where the road crosses the Hyderabad Wadi line of railway, is situated the station of Begampet. Passing over two Warren girder bridges, the road turns E. and descends nearly to the level of the lake, rising again as it approaches Secunderabad. The Begampet lines, where an Indian Infantry regiment is usually stationed, lie to the N., and on the S. a huge block of buildings, surrounded by a wall, marks the palace of one of the former Ministers, Sir Vikar-ul-umara. The road then enters the Secunderabad Cantonment, which comprises the areas of Chilkalguda, Bowenpalli, Begampet, Trimalgiri, N. Trimalgiri and Bolarum. To the E. of the junction station is Lallaguda, the railway settlement.

The *Brigade Parade-ground* at Secunderabad is a fine stretch of ground, and is used almost entirely for ceremonial purposes. There are several fine buildings in

the Cantonment, including the King Edward VII. Memorial Hospital (with 225 beds); the United Service Club stands out as a landmark for miles around. The two hotels are on the Maidan, close to the railway station. There are a number of churches in different parts of the Cantonment.

At **Trimalgiri** (Trimulgherry), 3 m. N.E. of Secunderabad, is an entrenched camp surrounded by a stone ditch and earthen parapets and flanked by five bastions, affording accommodation in time of need for 4000 persons. The *Military Prison*, which stands due W. of the S.W. bastion of the entrenchment, is popularly called Windsor Castle, from its high tower and castellated look. The *Station Hospital* is due S. of the S.E. bastion. Two British infantry regiments, a British cavalry regiment and a battery of horse and another of field artillery are stationed here. The three Indian infantry regiments are quartered at Secunderabad.

Bolarum, 6 m. N. of Secunderabad, and now incorporated with it, was formerly the principal Cantonment of the Hyderabad Contingent Force, which has since 1903 been amalgamated with the rest of the Indian Army. It is now a station for two Indian cavalry regiments. The *Military Hdqrs.* Offices are here; and also a Country Residency, occupied by the Resident and his staff, when Bolarum, owing to its higher elevation, is cooler than Hyderabad.

From Secunderabad the Hyderabad Godavari Valley Ry. runs to Aurangabad and Manmar (Route 4). Bolarum is a station on this line. Another line runs S. and connects with the Madras and S. Mahratta Rly. at Kurnool (Route 30, p. 589); direct train service between Secunderabad and Bangalore by this line, which passes

through Hyderabad (metre-gauge) station.

From Secunderabad the line to Bezwada runs E.

149 m. from Wadi Jn. is **Bhangir** (Bhongir) (R.), an important trading centre, celebrated for its pottery, situated at the foot of a fortified rock, on which are the ruins of a palace.

202 m. **Kazipet** Jn. (R.). Hdqrs. of a District. About 4 m. from this station is **Hanamkonda**, which contains a remarkable temple (c. 1163). It has been ruined by an earthquake, but is still worthy of a visit as a fine specimen of the Chalukyan style of S. India. In front of the triapsidal temple was a splendid Hall of Columns; both of these are placed on high basements, and both contain numbers of elaborately-decorated pillars of very hard dark stone, with pierced screens between those in the outer rows. It is dedicated to Rudra, God of Thunder. (See Fergusson's *Indian Architecture*, I, 432.)

A good road continues for about 10 m. more past the State Jail (well worth a visit for its carpet-weaving) to **Warangal**, the famous fortress capital (p. 570). The journey from Kazipet to Hanamkonda, and thence on to Warangal, can easily be made in one day, with a visit to the jail thrown in. The station-master at Kazipet, if advised in advance, will arrange for a car; provisions must be taken.

At Palampet, on the shores of Ramappa Lake, 40 m. N.E. of Hanamkonda, are some temples which have been described¹ as "the brightest stars in the galaxy of mediæval Deccan temples." The road is suitable for motors. There is a State R.H. at Mulag, 12 m.

¹ *The Temples of Palampet*, by G. Yazdani, Dir. of Archaeology, Hyderabad State (No. 6, *Memoirs, Arch. Survey of India*, Calcutta, 1922).

from Ramappa, a noted centre for big game.

An important broad-gauge line of railway has been constructed from Kazipet to (103 m.) Balharshah (p. 138), where it connects with the G.I.P. Railway line to Chanda and Nagpur. The line was opened for passenger traffic in November 1928, and a direct service of trains is in operation between Madras (p. 614) and Delhi, *viâ* Bezwada, Kazipet, Chanda, Nagpur and Itarsi (Route 9). This route is 200 m. shorter than the former route *viâ* Manmar. The stations on the line are not of importance from a visitor's point of view. There is a motor-bus service from Pedapalli station (47 m.) to Karimnagar, the hdqrs. of a district which is noted for its silver filigree work.

208 m. **Warangal station.** About $\frac{1}{2}$ m. from the station, visible thence only as a long line of earthworks, stands the noted Hindu fort city of Warangal (Orakkal, "solitary rock"). It was the ancient capital of the Kakatiya, or Ganapati, dynasty, which was attacked by Malik Kafur in 1309 and captured by Muhammad Tughlak in 1323, after which the kingdom disappeared. The most interesting of the objects inside the fort are the four gateways called Kirthi Stambhas, which were apparently openings to a square, and which reproduce wooden forms in every detail, the side struts being specially remarkable. There is also a small half-ruined temple with some capital figures of bulls in front of it. The fine hall and other buildings belong to the Muhammadan period.

The line to Bezwada turns sharply S.E. to

261 m. **Dornakal junction station (R.).** Branch to Singareni Collieries, 16 m. Here are the coal-mines of the Deccan Mining

Company, with rich beds of iron ore. There is a small English church.

From (10 m.) Karepalli Junction on the Singareni branch a line runs (24 m.) to **Kothagudam**, which is the station for the famous Temple of **Bhadrachalam** 20 m. farther on. Public motor-bus service from Kothagudam to Borgham Pahar, on the S. bank of the Godavari, where the river is crossed; the ferry-boats land visitors within a few yards of the temple which is in British territory. Rama is said to have crossed the Godavari near this spot on his journey to Lanka (Ceylon) in search of his wife, Sita; and his house is shown to Hindus. The wealth of the temple, which is surrounded by twenty-four smaller shrines, is very great.

313 m. **Yerupalayi**, is the last station in the Nizam's Dominions.

328 m. **Kondapalli station.** Ruins of a once celebrated fortress, built in 1360 A.D. It was taken by the Emperor Aurangzeb in 1687, and by the British, under General Caillaud, in 1766. The old palace of the Kutb Shahi Kings stands on an elevation above the valley; part of it has been adapted as a R.H. Panthers abound in the neighbouring hills. Kondapalli is noted for its manufacture of wooden toy-models of bungalows, with furniture and crockery complete.

338 m. **Bezwada**, or Krishna, station (R., D.B.) (see p. 518), on the main line between Madras and Calcutta (Route 25).

ROUTE 29.

HOTGI JUNCTION to BIJAPUR,
Caves and Temples of Badami,
and Gadag Junction.

292 m. from Bombay and 173 m. from Poona, on the G.I.P. Ry. main line from Bombay to Madras (Route 26), and 9 m. S.E. of Sholapur (p. 537) is

Hotgi junction station (R.). From here a metre-gauge line of the Madras and S. Mahratta Ry. runs S. (174 m.) to Gadag, where it connects with the line from Hubli to Guntakal junction (Route 30).

Between the first and second stations from Hotgi the Bhima River is crossed, flowing in a deep rocky bed. From **Minchnal**, the station before Bijapur, the domes and minarets of the city are plainly seen to the S.

59 m. **BIJAPUR**¹ station * (originally *Vijayapura*, "City of Victory") (R., D.B.; pop. 32,485). The railway station is E. of the city and close to the Gol Gumbaz, the great tomb of Muhammad 'Adil Shah.

Yusaf Khan, the first King of Bijapur on the decay of the Bahmani dynasty, was a son of Amurath II., of Anatolia, and a Turk of pure blood, whose mother was forced to fly with him from Constantinople while he was still an infant. After a varied career he was purchased for the body-guard at Bidar (p. 557), and raised himself to such pre-eminence that in 1489 he was enabled to proclaim his independence and establish himself as the founder of the 'Adil Shahi Kings of Bijapur. The

following is the order of their accession :—

	'Adil Shah'	A.D.
Yusaf Khan,		1490
Ismail	"	1510
Mallu	"	1534
Ibrahim I.	"	1535
'Ali I.	"	1557
Ibrahim II.	"	1580
Muhammad	"	1626
'Ali II.	"	1656
Sikandar	"	1673 to 1686

in which year the city was taken by Aurangzeb. The great architectural outburst of the place followed on the capture and spoil of Vijayanagar (p. 585) after the Battle of Talikota in 1565. The kingdom extended to the West Sea, and Goa was a portion of it.

The Kaladgi District was re-named Bijapur in 1883, when Government decided to re-occupy the old capital as administrative headquarters of the District. Those who object to the utilitarian uses to which a number of the buildings at Bijapur have been put, must also remember that by its action Government has saved these and the other buildings from the complete destruction which was threatening them.

Torweh, or **Nauraspur**, about 1610 A.D. was a great suburb—a rival city, to the W. of Bijapur; but when Aurangzeb took the latter the former was "quite depopulated, its ruined Palaces only remaining, with a thick wall surrounding it, whose stately gateways were falling to decay." This suburb, then, whose walls extended 3 m. from the W. gate of the fort, and probably other suburbs which have now utterly perished, must have been included in the 30 m. circuit which tradition ascribes to Bijapur. What is called the city now is the fort, of which Grant Duff says it was 6 m. in circumference. Within the circuit of the fort is the citadel, with walls extending 1650 ft. from N. to S. and 1900 ft. from W. to E. An examination

¹ See *Bijapur: A Guide to its Ruins, with Historical Outline*, by H. Cousens (Poona, 1889). Also *Architectural Antiquities of Western India*, pp. 70-81, by H. Cousens (India Society, London, 1906).

of the buildings will give proof of the former riches and magnificence of this old capital. Two days will not be too much to devote to the principal buildings alone.

The Gates of the fort or city are :—

The Fateh Gate (1),¹ in the centre of the S. wall of the city, by which Aurangzeb is said to have entered.

The Shahpur Gate (2), on the N.W. The gate itself is furnished with long iron spikes on the outside, to protect it from being battered in by the elephants of an enemy. This was a common device throughout India. S. of it, on the W. of the city, is the

Zohrapur = Jorapur Gate (3); and 600 ft. to the S. of that is the

Makka Gate (4), with representations on either side of lions trampling on an elephant. This gate is closed and converted into a school. A less imposing one, a few hundred yds. farther N., serves its purpose. Almost exactly opposite to it, on the E. side of the city, is the

'Alipur Gate (5), or High Gate, wrongly called in maps and elsewhere the Allahpur Gate. N. of it is the

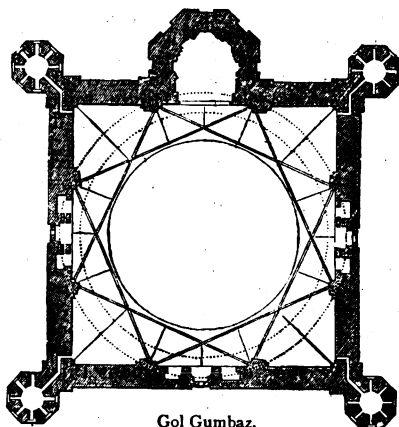
Padshahpur Gate (6), near the railway station.

In the centre of the N. wall is the Bahmani Gate (7).

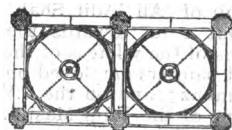
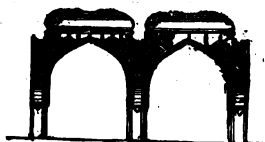
On the E. side of the city, close to the railway station, is the *Mausoleum of Muhammad 'Adil Shah*, seventh King, a magnificent structure, generally called the *Gol Gumbaz*, or "Round Dome" (8). Fergusson, in his *Hist. of Ind. Arch.* (2, 273), says of this building: "The tomb of Muhammad was in design as complete a contrast to that" of Ibrahim II. (see p. 503), "as can well be imagined, and is as remarkable for

simple grandeur and constructive boldness as that of Ibrahim was for excessive richness and contempt of constructive properties. It is constructed on the same principle as that employed in the design of the dome of the great mosque, but on so much larger a scale as to convert into a wonder of constructive skill what, in that instance, was only an elegant architectural design." It is built on a platform 600 ft. square and 2 ft. high. In front is a great gateway, 94 ft. by 88 ft., with a Nakkar Khana (music gallery), now a museum of Bijapur antiquities. The tomb is a square building, with sides measuring 196 ft. (exterior), and at each corner is a tower, seven storeys high. In the centre is the great dome, 124 ft. in diameter, while that of St Peter's is 139 ft., and that of St Paul's 108 ft. Over the entrance are three inscriptions—"Sultan Muhammad, inhabitant of Paradise"; "Muhammad, whose end was commendable"; "Muhammad became a particle of heaven (lit. House of Salvation), 1067." The date, thus three times repeated, is 1659 A.D. The surface of the building for the most part is covered with plaster. Each façade has a wide, lofty arch in its centre, pierced with small windows and a blind one on either side, and above it is a cornice of grey basalt and a row of small arches supporting a second line of plain work, surmounted by a balustrade 6 ft. high. The corner towers are entered from winding staircases in the thickness of the walls of the main building, and terminate in cupolas. Each storey has seven small arched windows opening into the court below. From the eighth storey there is an entrance to a broad gallery inside the dome, which is so wide that a carriage might pass round it. Here there is a most remarkable echo; a soft whisper at one point of the gallery can be

¹ The numbers refer to the corresponding numbers on the plan of Bijapur (p. 571).



Gol Gumbaz.



Section of Domes, Jami Masjid.

heard most distinctly at the opposite point, and, as Mr Cousens says, "one pair of feet is enough to awaken the echoes of the tread of a regiment." The great hall, 135 ft. square, over which the dome is raised, is the largest domed space in the world. The internal area of the tomb is 18,225 sq. ft., while that of the Pantheon at Rome is only 15,833. "At the height of 57 ft. from the floor-line," says Fergusson (*Hist. of Ind. Arch.*, 2, 274), "the hall begins to contract by a series of pendentives as ingenious as they are beautiful, to a circular opening 97 ft. in diameter. On the platform of these pendentives, at a height of 109 ft. 6 in., the dome is erected, 124 ft. 5 in. in diameter, thus leaving a gallery more than 12 ft. wide all round the interior. Internally the dome is 178 ft. above the floor, and externally 198 ft. from the outside platform; its thickness at the springing is about 10 ft., and at the crown 9 ft."¹ From the gallery outside there is a fine view over Bijapur. On the E. is 'Alipur; on the W. are seen the Ibrahim Rauza, the Upari Burj, the Sherza Burj, or Lion Bastion, and to the N.W. the unfinished tomb of 'Ali 'Adil Shah II., and about 1 m. towards the N. the ruins of the villages of the masons and painters employed on the Gol Gumbaz; and on the S.W. is the dome of the Jami Masjid. There is a small annexe to the mausoleum on the N., lately roofed over, built by Sultan Muhammad as a tomb,

1 "The most ingenious and novel part of the construction is the mode in which its lateral and outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut off the angles, but that, as shown in the plan, their arches intersect one another and form a very considerable mass of masonry perfectly stable in itself; and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome."—Fergusson, *Ind. Arch.* 2, 274.

it is supposed, for his mother, Zohra Sahiba, from whom one of the suburbs was called Zohrapur, now called Jorapur. It was never finished or occupied.

Below the dome is the cenotaph of Sultan Muhammad in the centre. On the E. side are the graves of his youngest wife and of the son of 'Ali 'Adil Shah II.; on the W. are those of his favourite Hindu mistress and dancing-girl Rambha, his daughter, and his eldest wife, mentioned by Bernier.

On the edge of the platform W. is the mosque attached to the mausoleum, a building of no mean size and of considerable beauty of design, but quite eclipsed by the size of the Gol Gumbaz.

The museum of Bijapur antiquities in the Nakkar Khana (p. 572), should be visited. The exhibits include some of the famous Bijapur carpets.

The Jami Masjid (9), nearly $\frac{1}{2}$ m. S.W. of the Gol Gumbaz, is entered by a gateway on the E. side. The surrounding wall was never completed on the E. The arcades on the N. and S. sides are 31 ft. broad. In the centre of the quadrangle is the *hauz* or tank for ablutions, now dry. Fergusson says: "Even as it is, it is one of the finest mosques in India."

It was commenced by 'Ali 'Adil Shah I. (1557-79), and, though continued by his successors, was never completely finished. The mosque proper has a façade of nine bays, and is five bays in depth. Each of the squares into which it is divided has a domed roof, beautiful, but so flat as to be concealed externally. The centre, a space 70 ft. square, corresponding to twelve of these squares, is roofed over by the great dome, which is 57 ft. in diameter. It is supported on pendentives in the same manner as the Gol Gumbaz. The pavement below the dome is of chunam, divided by black lines into numer-

ous squares called *musallahs*, or compartments for persons to pray on, imitating the *musallah*, or prayer-carpet, which the faithful carry with them to the mosques. These were made by order of Aurangzeb when he carried away the velvet carpets, the large golden chain, and other valuables belonging to the mosque.

The mihrab, which marks the place on the W. to which the people turn in prayer, is gilded and ornamented with much Arabic writing. There is also a Persian quatrain. The date is 1636 A.D.

The **Mihitari Mahal** (10) is the name given to the entrance gateway to the Mihitari Mosque, a building of minor importance. It stands between the Jami Masjid and the citadel, on the S. of the road. It is a small but elegant structure, three storeys high, with minarets at the corners and ornamental carving in soft stone about its balconied and projecting windows. Fergusson says (2, 278) of this structure: "One of the most remarkable edifices is a little gateway, known as the Mihitari Mahal. It is in a mixed Hindu and Muhammadan style, every part and every detail covered with ornament, but always equally appropriate and elegant. Of its class it is perhaps the best example in the country, though this class may not be the highest."

The Palace of the **Asâr-i-Sharif** (11), "illustrious relics," which are hairs of the Prophet's beard, is a large heavy-looking building of brick and lime, standing outside the moat of the inner citadel and the centre of its E. rampart. The E. side is entirely open from the ground to the ceiling, which is supported by four massive teak pillars, 60 ft. high. This forms a deep portico 36 ft. broad, and looks upon a tank 250 ft. square. The ceiling of the veranda or

portico is panelled in wood and has been very handsomely painted. The whole of the W. side is occupied by rooms in two storeys. A flight of stairs ascends to a hall 81 ft. long and 27 ft. broad, where some of the fine old carpets and brocades of the Palace are shown under glass. Most of the former have now been transferred to the **Museum**. Opening right from this hall is an upper veranda or ante-chamber which looks down into the portico (already described) below. Its ceilings and walls have been gilded; the doors are inlaid with ivory, and in the palmy days of Bijapur the effect must have been very striking. The **Asâr-i-Sharif** formerly communicated on its W. side with the citadel by means of a bridge, of which nothing now remains but the piers. Originally built as a court of justice by Muhammad Shah about 1646, it succeeded to the honour of holding the precious relics of the Prophet after a similar building within the citadel had been burned down.

The **Arkilla** or **Citadel**.—The only citadel gateway that remains is at the extreme S., facing E.; here the walls are full of ancient pillars and sculptured stones, taken from Jain temples which probably stood on this spot when the Muhammadans stormed the citadel. Other stones were utilised in the construction of the two "old mosques" within the citadel.

The **Old Mosque** (12), just N.W. of the gate, is a converted Jain temple. The central mandapam, or hall, two storeys high, serves as the porch. The inner doorway, with its perforated screens, is Muhammadan work. The mosque proper is made up of Hindu or Jain pillars of various patterns and heights. At the N. side, near the centre row, is a wonderfully handsome and elaborately-carved black pillar, and to the N.E. of

it an ancient Kanarese inscription. On several of the pillars around are inscriptions, some in Sanskrit and some in Kanarese. One bears the date 1320 A.D.

The **Anand Mahal** (13), or "Palace of Delight," where the ladies of the seraglio lived, is in the centre of the citadel. It was built by Ibrahim II. in 1589, and intended partly for his own use, but the façade was never finished. It contains a very fine hall, and is used as an official residence. The Station Club is also located here.

The **Gagan Mahal** (14), or (sky) "Heavenly Palace," supposed to have been built by 'Ali 'Adil Shah I., is on the W. of the citadel close to the moat, and faces N. It has three magnificent arches. The span of the central one is 61 ft., and that of each of the side arches 18 ft. The height of all three is the same—about 50 ft. It was used as a darbar hall, and on the roof was a gallery, from which the ladies could see what occurred on the open space in front. It is said that here the Emperor Aurangzeb received the submission of the King and the nobles on the fall of Bijapur.

An old gateway of the Palace to the S.E. of the Gagan Mahal has been converted into the **Station Church** (15). In plan it is a square; the roof is supported by four pillars, and it is decorated with exquisite relief patterns in flat plaster work. The beautifully wrought-iron screen was found in the **Chini Mahal**.

About 150 yds. to the N.E. of the Gagan Mahal is another old mosque (16), built with the stones of a Jain temple. It has ten rows of pillars seven deep.

E. of this is the **Adalat Mahal**, now the Collector's residence, with a small mosque on the N. side, and an extremely pretty pavilion or pleasure house E. of it and in

front of the Civil Surgeon's residence, on a corner of the citadel wall. A little to the N. of this is **Yakut Dabuli's Tomb and Mosque**. The tomb is square, with stone lattice-work screens. It was Yakut Dabuli who decorated the mihrab of the **Jami Masjid**.

On the extreme W. of the citadel is the **Sat-Manzili** (17), or "Seven Storeys," Rambha's pleasure Palace, from the top of which the whole city could be overlooked. Of this only five storeys now remain. A peculiarity of the building is the number of water-pipes and cisterns round about it. It formed the N.E. corner of a vast structure wrongly called the **Granary** (18), at the S. end of which is a large building, which was the public Palace of the Kings, where their public audiences were held.

This Palace is called the **Chini Mahal** (19), from the quantity of broken china found there, and possesses a fine hall 128 ft. long. It is now used as the Collector's office and the Judge's Courts.

In front of the **Sat-Manzili** (17), in the centre of the road, stands a beautifully ornamented little pavilion known as **Jal Mandir**, (20), signifying that jets of water played in it. From this the moat of the citadel is crossed by a causeway 140 ft. long, but the average breadth of the moat may be taken as 150 ft. Opposite the end of the causeway on the outside is the **Mallika Jahan or Jhanjiri Mosque**, one of the most effective buildings in all Bijapur.

N.E. of the gateway and the Old Mosque is the **Makka Masjid** (21), a miniature mosque of beautiful proportions and great simplicity of design. The massive minarets at the corners of the high walls which surround it in all probability belonged to an earlier building. The façade of the mosque proper has five bays of

arches about 8 ft. high, is two bays deep, and is surmounted by a dome.

Immediately to the W. is a huge walled space, known as the Hāthi-khana (30), as it is thought to have been an elephant stable, and adjoining it S. is a tower which was probably used for the storage of grain. Close by on the E. wall of the citadel is the picturesquely situated high-standing Chinch Diddi Mosque.

The unfinished Tomb of 'Ali 'Adil Shah II. (22) lies outside the citadel to the N. It is a noble ruin, a square with seven large Gothic-looking arches on each side, constructed on a terrace 15 ft. high and 215 ft. square. Had not the death of the Sultan put a stop to its progress and prevented its completion in conformity with the original design, it would have surpassed every other building at Bijapur both in magnificence and size. The cenotaph is in the centre enclosure, which is 78 ft. square, and if completed would have been crowned by a dome.

Close to this tomb on the S.W. is the pretty Bukhara Masjid (23), for a time used as the Post Office, and just N. of this is the beautiful mosque and tomb of Mirza Sandal. To the W. again, half-way to the Haidar Burj, is the Sikandar Rauza, the plain grave of the last ruler of Bijapur, who was compelled to surrender his kingdom to the Mughal Emperor.

To the W. of the city, and near the Makka Gate, are two domed tombs close together and very much alike, known as the Jor Gumbaz and to Europeans as the "Two Sisters" (24). The octagonal one contains the remains of *Khan Muhammad*, assassinated at the instigation of Sultan Muhammad for his treacherous dealings with Aurangzeb, and of his son *Khawas Khan*, Wazir to Sikandar. The dome is nearly complete, and

springs from a band of lozenge-shaped leaves. The space within forms a beautiful room. The square building is the mausoleum of *Abdul Razzak*, the religious tutor of Khawas Khan. It is a large building, now much decayed. Near it S. is the Tomb, with its unfinished brick dome, of *Kishwar Khan*, whose father, Asad Khan, is repeatedly mentioned by the Portuguese. He founded the fort of Dharur in the time of 'Ali 'Adil Shah I., and was taken and put to death by one of the Nizam Shahi Kings.

The old execution tree (33) an *Adamsonia* or "*Gorak Imli*," is passed on the way from the citadel to the "Two Sisters," in the compound of the Judge's bungalow.

The Andu Masjid (25), 1608, stands on the E. side of the road, which runs S. from the citadel. It is a two-storeyed building, the lower part forming a hall, and the upper part the mosque proper and its small court. The façade has three bays; it is surmounted by a fluted dome and four small minarets, and the masonry and workmanship are finer than those of any other building in Bijapur. A road running W. from here and S. of the "Two Sisters" leads to the tomb of the Begam Sahiba, a wife of the Emperor Aurangzeb, who died of plague, and to the Nau Bagh. Another road to the W. from opposite the house of the District Superintendent of Police, 300 yds. S. of the Andu Mosque, leads to the Jami Masjid of Ibrahim I., and, according to tradition, the tomb of 'Ali I. The latter is a simple building with a corridor all round it. In front of it, on a high platform, is a fine tombstone of dark green stone, both of which are richly and effectively carved.

700 ft. N. of the Jami Masjid is *Khawas Khan's Mahal*. *Nawab Mustafa Khan's Mosque*, 400 yds.

N. of this, and 500 yds. E. of the citadel, is a lofty building with a façade of three arches and a central dome supported on pendentives. Behind the mosque W. are the ruins of the Khan's Palace. Mustafa Khan Ardistani was a distinguished nobleman at the court of 'Ali 'Adil Shah I., and was murdered in 1581 A.D. by Kishwar Khan, who usurped the regency in the time of Ibrahim 'Adil Shah II.

Outside the W. wall of the city, 400 yds. from the Makka Gate, is

The Ibrahim Rauza (also called Roza) (26), a group of buildings which includes the tombs of Ibrahim II. 'Adil Shah, his Queen Taj Sultana, and four other members of his family. It is said to have been erected by a Persian architect. It is enclosed by a strong wall with a lofty gateway. The courtyard within was once a garden; in the centre of it is raised an oblong platform, upon which stands the tomb, and to the W. of it a mosque, with a fountain and reservoir between them. The five arches which form the E. façade of the *Mosque* are very graceful; above them, under the rich cornice, hang heavy chains cut out of stone. On each of the four sides of the *Tomb* is a colonnade of seven arches, forming a veranda 15 ft. broad round the whole edifice. The pavement of this colonnade is slightly elevated, and its ceiling is exquisitely carved with verses of the Koran, enclosed in compartments and interspersed with wreaths of flowers. The letters were originally gilded, and the ground is still a most brilliant azure. In some places the gilding also still remains. The border of every compartment is different from that of the one adjoining. The windows are formed of lattice-work of Arabic sentences, cut out of stone slabs, the space between each letter admitting the light. This work is admirably executed, and there is nothing to surpass it

in all India. Above the double arcade outside the building is a magnificent cornice with a minaret four storeys high at each corner and eight smaller ones between them. From an inner cornice, with four minarets on each side, rises the dome. The plan of the building resembles that of the tombs at Golconda. The principal apartment in the tomb is 40 ft. square, with a stone-slab roof, perfectly flat in the centre, and supported only by a cove projecting 10 ft. from the walls on every side. "How the roof is supported is a mystery which can only be understood by those who are familiar with the use the Indians make of masses of concrete, and with exceedingly good mortar, which seems capable of infinite applications. Above this apartment is another in the dome as ornamental as the one below it, though its only object is to obtain externally the height required for architectural effect, and access to its interior can only be obtained by a dark, narrow staircase in the thickness of the wall."¹ Over the N. door is an inscription in Persian extolling the building in very exaggerated terms. The last line is a chronogram, which gives the date 1036 A.H. = 1626 A.D. Over the S. door is another inscription in praise of the monarch, with the date 1633. Over the same door is inscribed—

[Translation.]

The work of beautifying this Mausoleum was completed by Malik Sandal.² Taj-i-Sultan issued orders for the construction of this Roza, At the beauty of which Paradise stood amazed. He expended over 1½ lakhs of huns, And 900 more.

¹ *History of Indian Architecture*, 2, 273. Fergusson also says that Ibrahim commenced his tomb "on so small a plan, 116 ft. sq., that it was only by ornament that he could render it worthy of himself, his favourite wife, and other members of his family."

² The tomb of this personage is W. of the incomplete tomb of 'Ali 'Adil Shah II. See p. 577.

The hun being Rs. 3½, the total expense was about £50,000. When Aurangzeb besieged Bijapur in 1686 he took up his quarters in the Ibrahim Rauza, which received some damage from the Bijapur guns. These injuries were partially repaired by the Raja of Satara, and the restoration was completed by the English.

Guns and Bastions.—The Burj-i-Sherza, or "Lion Bastion" (27), so called from being ornamented by two lions' heads in stone, is 300 yds. N. of the Zohrapur Gate. In the W. wall on the right-hand side on ascending the steps of the bastion is an inscription stating that it was built in five months, and giving the date 1671. On the top of this bastion is a huge gun, called the *Malik-i-Maidan*, "Lord of the Battle Plain." At the sides of the muzzle the representation of the mouth of a monster swallowing an elephant is wrought in relief. It was cast at Ahmadnagar in a bell metal which takes a very high polish. It is 14 ft. long, the circumference is about 13 ft. 6 in., and the diameter of the bore is 2 ft. 4 in. Just above the touch-hole is the following inscription—

The work of Muhammad Bin Husain Rumi.

At the muzzle is the following—

The servant of the family of the Prophet of God, Abu'l Ghazi Nisam Shah, 956 A.H. (= 1551 A.D.).

In the 30th year of the exalted reign, 1097 A.H., Shah 'Alamgir, conqueror of infidels, King, Defender of the Faith, Conquered Bijapur, and for the date of his triumph, He fulfilled what justice required, and annexed the territory of the Shahs, Success showed itself, and he took the *Malik-i-Maidan*.

About 150 yds. E. of the Sherza Burj, and near the heavy Idgah, is a strange building, called the *Upari Burj*, or "Upper Bastion," also called the *Haidar Burj* (28), after a General of 'Ali I. and Ibrahim II. It is a tower 61 ft.

high, oval in plan, with an outside staircase. On the way up will be noticed a Persian inscription recording the building of the tower in 1583.

On the top are two guns made of longitudinal bars held together with iron bands. The larger, called the *Lamcharri*, "far fier," is 30 ft. 8 in. long, and has a diameter of 2 ft. 5 in. at the muzzle and 3 ft. at the breech; the bore is 12 in. in diameter. The other gun is 19 ft. 10 in. long, with 1 ft. diameter at the muzzle and 1 ft. 6 in. diameter at breech.

On the *Landa Kasab* bastion, W. of the Fateh Gate and near the road from the Andu Masjid leading through the S. wall, is also a fine gun measuring 21 ft. 7 in. long, with a diameter at the breech of 4 ft. 4 in., and at the muzzle of 4 ft. 5 in., which must weigh nearly 50 tons.

There are several **Tanks** in Bijapur. The principal one is the *Taj Bauri*, named after Taj Sultana (29), 100 yds. inside the Makka Gate. The E. wing of the façade of the tank is partly ruined and partly used as a Municipal store-house. The W. wing is occupied by the municipal offices. Two flights of steps lead down to the water beneath an arch of 34 ft. span and about the same height, flanked by two octagonal towers. The tank at the water's edge is 231 ft. square. The water comes partly from springs and partly from drainage, and is 30 ft. deep in the dry weather.

The *Chand Bauri*—named after the famous Chand Bibi, the central figure of Meadows Taylor's "A Noble Queen"—in the N.W. corner of the city, was built in 1579 A.D., on the model of the *Taj Bauri*, and also has a fine arch over the steps leading down to it.

1½ m. to the S.W. of the

Shahapur suburb, situated to the N.W. of the city, is the tomb and Palace of Afzal Khan (p. 546). Adjoining the latter is a mosque of two storeys, and on a platform to the S.W. are eleven rows of tombs of women, which have given rise to the tale that they were the wives of Afzal Khan put to death by him. It will be remembered that the rise both of Sivaji and his father Shahji was intimately connected with the Bijapur kingdom, and it was only the contact of the Delhi Emperors with that which brought the Mahrattas into direct conflict with the Mughal power.

Waterworks.—Bijapur was supplied with abundant water by underground ducts. One source of supply was a spring beyond the suburb of Torweh, 5 m. W. of the citadel; another was the Begam Tank, 3 m. to the S. Along the line of the water supply occur towers supposed to be for the purpose of relieving the pressure in the pipes. The people evidently appreciated the advantage of having plenty of cool water about them, and traces of innumerable baths and cisterns are found in every direction. The water from the reservoirs, for instance, in the ruined Palace of Mustafa Khan, ran into a tank, from which it brimmed over into narrow stone channels, which passed in circuitous courses through the gardens, running over uneven surfaces to give it a sparkling and rippling effect.

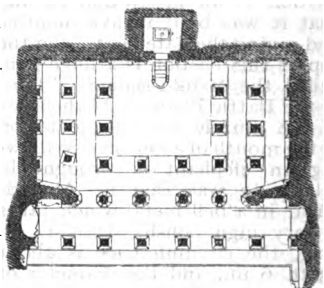
The modern waterworks constructed at Bhutnal, about 4½ m. N.W., are worth a visit.

The gaol (34), the way to which passes between lines of mausolea, big and small, is located in an old *musafarkhana* or caravanserai of remarkable size and proportions, and is well worth a visit. Close to it, the *Amin Dargah*, of considerable importance, has a collection of old pictures.

From Bijapur the line continues to

115 m. **Bagalkot**, S. of the Krishna River. Some 25 m. E. from this on the river was fought the famous Battle of Talikota on 23rd January 1565, which caused the downfall of the Vijayanagar kingdom (p. 585). The small town of Talikota lies 30 m. N. of the field of battle.

131 m. **Badami** station. A District Bungalow close to the station and a smaller Inspection Bungalow in the town are generally available for tourists, on previous application to the Collector. The



Cave at Badami, from a plan by Dr Burgess.

fort of Badami is to the N.E. of the town, 3 m. E. from the railway station, and on the heights above are some picturesque temples, from which there is a fine view. To the S. is another rocky, fort-crowned hill, in the face of which are four cave temples. The two hills (about 400 ft. high) approach so close to each other as to leave only a gorge, into which the town extends. E. of this is a fine tank. Badami was once the capital of the Chalukyas.

Three of the **Cave Temples** are Brahman works, and date from 550 A.D. to 580 A.D.; the fourth is Jain, and probably dates from 650 A.D.

Dr Burgess writes of them: "They stand as to arrangement

of parts between the Buddhist viharas and the later Brahmanical examples at Ellora, Elephanta, and Kanheri. The front wall of the Buddhist vihara, with its small windows and doors, admitted too little light; and so here, while retaining the veranda in front, and further protecting the cave from rain and sun by projecting eaves, the front of the Sala, or 'hall,' was made quite open, except the spaces between the walls and the first pillars from each end. In the sculptures—at least of the second and third caves—Vishnu occupies the most prominent place. In style they vary much in details, but can scarcely differ much in age; and as the third contains an inscription of Mangalesvara, dated Saka 500=578 A.D., we cannot be far wrong in attributing them all to the 6th century. The importance of this date can scarcely be overestimated, as it is the first of the kind yet discovered in a Brahmanical cave." In the veranda of the *First Cave*, excavated about 50 ft. up in the face of the rock, and consecrated to Siva, are four pillars and two pilasters. The two pillars to the S. have been broken by lightning, and are now supported by wooden blocks. The pillars are slightly carved in relief to about half-way from the top. The whole rests on a stylobate, along the front of which are Ganas (dwarf attendants of Siva) in all sorts of attitudes. On the left of the veranda is a dwarfpal with a Nandi over him. Opposite this dwarfpal is a figure of Siva, 5 ft. high, with eighteen arms, dancing the tandava.¹ Between it and the cave is a chapel, and beyond an antechamber leading to the hall. In it, on the left, is Vishnu, or Harihara, with four hands, holding the usual symbols, and on the right the Arddhanariswar, or combined male and female figure, attended by a

Nandi bull and the skeleton Bringi. A figure of Maheshasuri, or Durga, destroying the buffalo-demon Maheshasur is on the back wall, on the right wall Ganpati, and on the left Skanda. Between the antechamber and the hall are two pillars only. The hall has eight columns of the Elephanta type, and measures 42 ft. by 24½ ft. The ceiling and that of the antechamber are divided into compartments by carved beams. In the centre compartment of the former is a relief of the Great Snake's head. At the back of the hall is a small chapel with a lingam.

The *Second Cave Temple* is rather higher up the cliff, and has a fine view. At the ends of the platform in front of it are two dwarfpals with a female attendant. Four square columns, finely carved, separate the platform from the veranda, on the left of which is the Vahara Avatar, or Vishnu in the form of a boar, and on the right the Dwarf Avatar of Vishnu, dilated to an immense size, putting one foot on the earth and lifting the other over the heavens. On the ceiling in front of this is Vishnu with four arms, riding on Garuda, and in the central square of the ceiling is a lotus with sixteen fishes round it. On the top of the wall in a frieze are the figures of Vishnu as Krishna. The entrance to the inner chamber, 33 ft. by 23½ ft., is like that of the first cave; the roof of the chamber is supported by eight pillars; and the corbels are lions, human figures, vampires, elephants, etc. The adytum has only a square *Chavaranga*, or altar.

A sloping ascent and more flights of steps lead up to a platform, and a few steps beyond to a doorway; on the right of it is an inscription in old Kanarese. At the top of yet another flight of steps is the platform in front of

The *Third Cave*, below a scarp of 100 ft. of perpendicular rock.

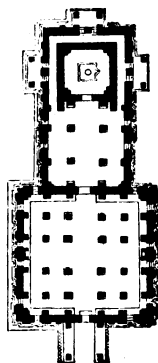
¹ See descriptions on pp. 29-30.

This cave, says Dr Burgess, is "by far the finest of the series, and, in some respects, one of the most interesting Brahmanical works in India." The façade is 70 ft. from N. to S., and has six square pillars and two pilasters 12½ ft. high. Eleven steps lead up to the cave, and on the stylobate Ganas are represented in relief. The brackets of the pillars represent male and female figures, Arddhanariswar, Siva, and Parvati, and on the columns themselves are carved elaborate festoons, and below medallions with groups of figures. Traces of painting are visible on the under side of the eaves and the roof of the veranda. At the W. end of the veranda is a statue of Narsingh, the fourth incarnation of Vishnu, a very spirited figure, 11 ft. high. On the S. wall is Harihara, of the same height, and beyond the veranda at the side of the first is the Dwarf or Vamana Avatar. At the E. end is Narayan, seated under Sheshnag. On the outer side of this is Vishnu reclining on a great snake, and on the inner wall is the Varaha, or Boar, incarnation; to the right is an inscription in Kanarese. Between the veranda passage and the hall are four pillars. The hall measures 65 ft. by 37 ft. Eight pillars, four to the front and two to the sides, form a space in front of the shrine; and on each side is a recess separated off by three pillars. The ceilings are divided into compartments throughout, with carved panels.

The Fourth, or Jain Cave, lies W. of the other three. The platform beyond the wall overlooks the lake or tank, and commands a fine view. A broad overhanging eave has been cut out of the rock in front of this cave. The façade has four carved pillars and two pilasters. On the left of the veranda, 31 ft. by 6½ ft., is the Jain divinity Parasnath, with bands round his thighs and cobras

coming out below his feet. On the right of the veranda is a Gautama Swami attended by snakes. The hall behind is 25 ft. by 6 ft.; in the shrine is a seated statue of Mahavira.

At Pattadakal, 10 m. N.E. of Badami, on the left bank of the Malprabh River, accessible only by cart or pony, are several temples, both Brahmanical and Jain, dating from the 7th or 8th century. They "are very pure examples of the Dravidian style of architecture; they are all



Temple at Pattadakal.

square pyramids divided into distinct storeys, and each storey ornamented with cells alternately oblong and square. Their style of ornamentation is also very much coarser than that of the Chalukyan style, and differs very much in character. The domical termination of the spires is also different, and much less graceful, and the overhanging cornices of double curvature are much more prominent and important" (Burgess). Besides these, the village possesses a group of temples, not remarkable for their size or architectural beauty, but interesting because they exhibit the two principal styles of Indian architecture, in

absolute juxtaposition (see *Architecture of Dharwar and Mysore*, pp. 63, 64). The Temple of *Papnath* is of the N. style, and is probably rather older than that of *Virupaksha*, which dates from the early part of the 8th century. The Temple of *Papnath* is 90 ft. long, including the porch, and 40 ft. broad. There are sixteen pillars in the hall and four in the inner chamber, exclusive of those in the porches.

At *Aiholi*, 8 m. to the N.E. of *Pattadakal*, there is a very numerous collection of archaic temples, well worth a careful visit. The *Durga Temple* has some very remarkable carving; and here, too, are many dolmens.

Aiholi can best be reached from *Katgeri* station, at a distance of about 12 m. from the railway; for 8 m. there is a good road.

173 m. from *Hotgi* is *Gadag* junction station (R., D.B., $\frac{1}{2}$ m.).

Gadag (anciently *Kratuka*) is a town of 41,208 inhabitants. The town is rapidly rising in importance as a railway junction and centre of cotton trade. There are a spinning and weaving mill and numerous cotton gins, besides presses. The cotton market with its numerous spacious godowns on both sides of a broad road lined with beautiful trees, and the *Maconochie Market* are considered to be the best designs in the whole of the Presidency. In its N.W. corner is a *Vaishnavite Temple*. The entrance is under a high gateway or *gopuram*, with four storeys, and 50 ft. high. The door is handsomely carved with sixteen rows of figures in relief on either side. The *Someswara Temple*, now a school, is richly decorated throughout.

In the fort is a fine *Temple* dedicated to *Trimbakeswar* or, as sometimes said, to *Trikuteswar*, the "Lord of the Three Peaks." The outside is one mass of most

elaborate carving. Two rows of figures run along the entire front and back; those of the lower row are 2 ft. 9 in. high, including their canopy, and are 156 in number. In the upper row are 104 figures, 13 in. high, 52 in the front, and the same in the back. Between the four pillars on the E. is a colossal bull. Immediately behind the main portion of the temple, to the right of the enclosure, is a *Temple to Saraswati*. The porch is the finest part of it; it contains eighteen pillars, some of them exquisitely carved, and six pilasters. The three first of the two centre rows of pillars deserve particular notice for their elegance of design and exquisite carving.¹ There are numerous inscriptions at the temples, one of which has the date *Shaka* 790 = 868 A.D.

Lakkandi (anciently *Lokkikandi*) is about 8 m. S.E. of *Gadag*, and about half that distance from *Harlapur* station (12 m. E. of *Gadag*) on the line to *Guntakal*. The place is full of ancient temples.

The façade of the *Kashi Vishwanath Temple* has been supported by four pillars, of which that to the N. has gone. The doorways are elaborately carved, and though the roof is ruined, the temple is by far the handsomest in *Lakkandi*, and well worth seeing; but, being built of coarse granite, the carving is not so clear and sharply defined as in the case of other famous temples.

1 Meadows Taylor says: "It is impossible to describe the exquisite finish of the pillars of the interior of this temple, which are of black hornblende, or to estimate how they were completed in their present condition, unless they were turned in a lathe; yet there can be little doubt that they were set up originally as rough masses of rock, and afterwards carved into their present forms. The carving on some of the pillars and of the lintels and architraves of the doors is quite beyond description. No chased work in silver or gold could possibly be finer, and the patterns to this day are copied by goldsmiths, who take casts and moulds from them, but fail in representing the sharpness and finish of the original."

To the W., on the opposite side of the road, is a *Temple to Nandeswar*, or "Siva, Lord of the Bull Nandi." There is a Kanarese inscription on the ledge of the W. division of the roof, between the four pillars. It stands on the N. side of a tank, which it overlooks.

The *Temple of Iswara*, the roof of which has fallen in, is very old; the exterior is handsomely carved, and is said to be the work of Jakanacharya, the great sculptor and architect of the Hoysala Ballala kings, who executed the carvings at Halebid (p. 596), Belur (p. 597) and probably also at Somnathpur (p. 601).

A narrow path, thickly shaded for about 100 yds., leads from it to a *Baoli*, or well, the sides of which are faced with stone. There are flights of steps to the water on three sides, and on either side of the first step is an elephant, so well carved that it is popularly attributed to Jakanacharya.

About 200 yds. from this, on the W. side of the tower, is a *Temple to Manikeswar*, a name of Krishna, so called because every day he gave to Radha a ruby, which is called a manik. A very pretty small tank adjoins the temple. It is faced with stone, and has several buttresses projecting into the water, said to be carved by Jakanacharya. On either side of the entrance into the temple are four pillars of black basalt. This temple is surrounded by beautiful trees of great size.¹

From Gadag the ry. runs E. to Guntakal junction (Route 30) and W. to Hubli junction (for Bangalore and Mysore), Dharwar, and Londa junction (Route 31).

¹ See *Architectural Antiquities of Western India*, by H. Cousens, p. 27.

ROUTE 30.

GADAG JUNCTION to HOSPET (for Hampi and Vijayanagar), Bellary, and Guntakal Junction.

GUNTAKAL JUNCTION to

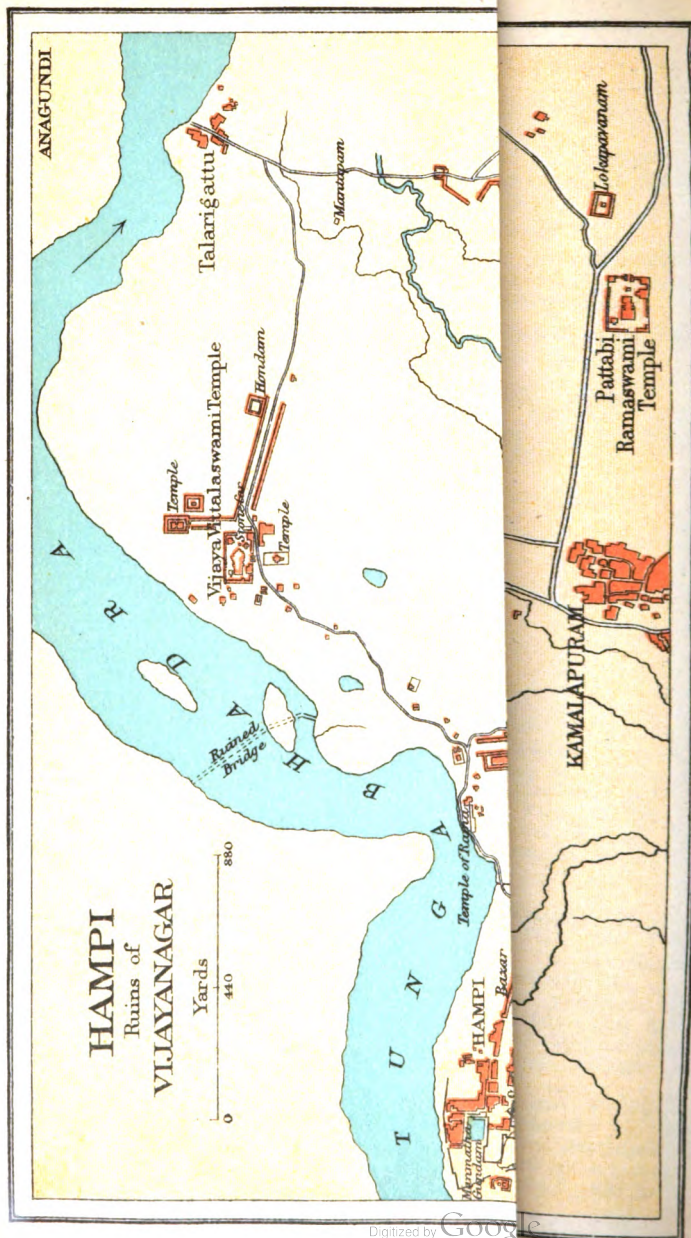
- (a) Kurnool and Secunderabad (via Dronachellam), Nandyal, Guntur, and Bezwada; and
- (b) Dharmavaram and Bangalore.

Gadag junction station (R., D.B.) (p. 583) on the Hubli-Guntakal Section of the Madras and S. Mahratta Ry.

36 m. from Gadag, **Koppal**. The line passes through an outlying portion of the Nizam's Dominions. There are two forts at Koppal; the upper, which is on the summit of a hill, 400 ft. above the plain, was described by Sir John Malcolm as the strongest place he had seen in India. The lower fort was rebuilt in 1786 by Tipu's French engineers, and was taken in 1790, after two months' siege by the British and the Nizam's forces. In 1857 it was seized by Bhim Rao, a Mahratta Brahman, who attempted to raise the country, but was defeated and killed by a British detachment sent from Bellary.

53 m. **Hospet** station (R., D.B.). Branch, 43 m. S., to Kottur. Another branch to Ramandrug, 18 m., and Kanivihalli, 25 m. The Ramandrug plateau (3500 ft.) which is within the Sandur State (p. 588), was the sanatorium of Bellary when troops were stationed there.

Hampi (9 m.) and **Vijayanagar** can most conveniently be visited from Hospet. The station-master will arrange for a country cart or jhatka. Bellary (p. 588) is 34 m. away.



Vijayanagar (City of Victory) and Hampi. ★—Hampi is the site of the ancient capital of the Vijayanagar Kings, who dominated S. India from 1336 to 1565 A.D., the date of the Battle of Talikota; even after 1565 they continued to rule, though nominally. Vijayanagar continued to be the capital till at least 1570 A.D. The ruins cover 9 sq. m., including *Kamalapur* on the S. and *Anagundi*, the earliest seat of the dynasty, N. of the Tungabhadra. Mr R. Sewell's *A Forgotten Empire* (Sonnenschein, 1900), deals fully with them.

The Kamalapur D.B. is 7 m. N.E. from Hospet; it is an old temple converted into a good D.B. There is a fair road from Kamalapur to Hampi, which winds round the rocky hills between which the old city was built. The site is watered by a channel from the river. The distance between Kamalapur and Hampi has been described as "virtually a vast open-air museum of Hindu monuments in the Dravidian style of architecture." Outside the inner fort, or citadel, there are a number of important structures in ruins; within the citadel remains of Palaces, pavilions, temples, and many other structures still exist in great profusion.

Vijayanagar was founded on the fall of the Hoysala Ballala dynasty (p. 596), about 1336 A.D., by two brothers, Bukka and Harihara, who had been driven out of Warangal. Their descendants flourished here till the Battle of Talikota (1565), and afterwards at Penukonda, Vellore, Chandragiri, and (as some writers say) Chingleput, for another century, until finally overwhelmed by the advancing Muhammadan powers of Bijapur and Golconda. The Rajas of Anagundi, an old village on the opposite side of the Tungabhadra River (now in the Nizam's Dominions) claim to be the surviving representatives of the dynasty.

During the two and a quarter centuries that the Vijayanagar Rajas held the city of Hampi they extended it and beautified it. The Venetian traveller Cæsar Frederick, who saw "Bezenagar" in 1567 soon after its fall, describes it as being 24 m. round, enclosing several hills. The ordinary dwellings were mean buildings with earthen walls, but the three Palaces and the pagodas were all built of fine marble.

The rout of the Hindu forces at Talikota was so complete, and the dismay caused by the death of the old King Rama Raja was so great, that no attempt was made to defend the city, which was completely gutted by the Muhammadan conquerors. Colonel Briggs states that for two centuries afterwards the head of the Hindu Prince used to be annually exhibited at Ahmadnagar.

The main portion of the city was enclosed by walls forming a semicircle on the S. bank of the river; in the middle of this was the inner walled citadel and Palace, and on the N. bank of the river was another large fortified area occupying the suburb of Anagundi; further outer lines of fortifications enclosed the city on the S. side.

Proceeding N. for $\frac{1}{4}$ m. from the D.B., the first remarkable building is the *King's or Ladies' Bath*, forming a portion of the King's Palace. It is a rectangular structure, with a *hauz*, or reservoir, in the centre, 50 ft. square and 6 ft. deep, in which fountains played; but there is no water now, and the whole has been a good deal injured. N.W. of the entrance are remains of the granite aqueduct which was carried from near the throne to the bath. The corridor of the bath, supported by twenty pillars, has an arched ceiling, richly carved with flowers. On either side is a projecting gallery ornamented with carving. Slightly to the W. of the bath and aqueduct is a

fine tank, and N. of these is the structure called the Arena, or the *Sinhasan*, the King's Throne. It consists of a succession of granite platforms 31 ft. high, the outer walls of which are carved in relief with representations of elephants, dancing-girls, hunting-scenes from the *Ramayana*, and camels, well executed. W. of the throne is an underground labyrinth, used probably as a cool retreat in the summer, and N. of the former are a remarkable stone trough and the ruins of a fine bazar. The stones forming the trough measure about 11 ft. by 6 ft., and the supports are 5 ft. 8 in. high. N. of this again is the temple of Ramachandra-swami, with pillars handsomely carved in relief with figures. The quadrangle inside measurement is 110 ft. from N. to S. and 200 ft. from E. to W. The temple has a vestibule carried on twelve pillars. The adytum is supported by black pillars most elaborately carved. On the plinth of the left gateway is a very long inscription in Old Kanarese. The stones of which this temple is built average 7 ft. 7 in. long and 2 ft. 6 in. deep.

To the E. of this group of buildings in the S.W. corner of the citadel, and across the road leading through the citadel to the N., are the ruins of three temples, one situated on the top of a small hill; while at a distance of $\frac{1}{2}$ m. to the N.E. of it are situated the *Zenana*, the Elephant Stables, and the Riding School. The first is an enclosure of walls 40 ft. high, with the building called the *Zenana* Palace in the N.W. corner, and the pavilion, figured in Fergusson's *Indian Architecture* (I, 417), and commonly called the Council Room, towards the S.E. corner. At various corners of the walls are similar small pavilions; in the N. wall is a large tower, and in the W. wall is a fine gateway closed over by projecting stones. The pa-

vilions are too heavy to be really effective, but are picturesque in their present state of ruin; the painted decoration of the upper rooms of the main pavilion is still visible. To the E. of the enclosure is a smaller *sinhasan*, or throne, and the fine range of Elephant Stables divided into eleven domed compartments, some of which were elaborately decorated inside. Along the front of the building is a broad drip-stone carried by brackets. The so-called Riding School or Concert Hall stands at right angles to the stables on the N. side of the *Zenana*; the purpose which this building really served is uncertain. To the S.E. of the *Zenana* is another temple, and between it and the three temples above mentioned is an interesting rock excavation, one of the chambers of which has a drip-stone carved on it.

Returning W., and passing outside the citadel on the N.W. side, where the gateway figured in Fergusson's *Indian Architecture* stands, and crossing the remains of a fine bazar, the next group of buildings of interest is reached on the S. side of the hill which dominates the village of Hampi. The first of these, on the left of the road, is a gigantic image of the *Narsingh Avatar*, carved out of a single block of granite, in an enclosure of ponderous granite blocks. The figure is that of a colossal lion-headed man with enormous projecting circular eyes and a huge mouth; it is seated, and has its legs and arms broken. A spirited carving of the *Shesh Nag* forms the canopy of the idol. The monolithic uprights at the door are 18 ft. 8 in. high out of the ground. Just outside the gate is an upright stone with a Kanarese inscription on both sides. A few yards N. of this enclosure is a small temple containing a huge *Lingam* and *Yoni*,

the largest representation of these objects of worship existing.

N.E. is a vast temple to Krishna-swami, enclosed by a granite wall. The breadth of the chief court is 200 ft. from N. to S., and the length 320 ft. from E. to W. At the gopuram which forms the entrance is a stone 8 ft. high, with a Kanarese inscription on both sides. There is also on the columns of the gopuram an inscription in Nagri and Kanarese. The carving of the various portions of the temple is noticeable, and the whole enclosure is extremely picturesque. N. of this temple, about 50 yds. off the road, is a temple with a huge Ganesh 10 ft. high; and a few yards farther another, vastly solid, built of granite, dedicated to Ganesh, in which the idol is 18 ft. high. The size of the enormous granite slabs which form the roof is remarkable. After passing this temple the precincts of what is now called *Hampi* are entered, and *Langur* monkeys may be seen in considerable numbers. A road-way, at a steep incline (almost impracticable for motor-cars) has been substituted for the old steps. After passing on the left a square building, which may have been a *math*, and some gigantic trees, the portal of the great temple of *Hampi*, which is sacred to Siva, under the name of Pampapati Swami, is reached. The gopuram at the N. entrance is truly gigantic, and taken in all its dimensions is (being over 165 ft. high) perhaps one of the largest in India. The length of the first quadrangle from E. to W. is 208 ft., and its breadth from N. to S. 134 ft. The second quadrangle is smaller, and has arcades all round built of granite. Europeans must not enter the second inner quadrangle, unless permitted to do so by the temple authorities. But there is no need to do so, as the temple differs in nothing from the

ordinary type which can be visited anywhere.

At the E. end of the grassy avenue in front of the temple is another large temple, picturesquely situated on a ridge, and approached by a long flight of steps with pavilions. The road turns N. from here and leads to the river, which makes a sudden bend at this point, and after passing a temple of Ramaswami (Ramchandra) with a stone lamp-stand in front of it, and the ruins of the old bridge, reaches at a distance of $\frac{1}{2}$ m. the temple of Vithoba, or Vijaya Vitalaswami, an *avatar* (incarnation) of Vishnu, also figured in Fergusson (I, 403). In front of this is a stone-weighting frame, and at the S. end of it is a stone rath (car) 26 ft. high.

There are three temples in the enclosure, which has four Dravidian gopurams. The second temple, on the left of the entrance, is much the largest and finest. The ceiling was formed of slabs of granite 35 ft. long, but all the slabs have been thrown down except two in the centre. There are fourteen columns, which supported the roof. Most of them are carved into representations of horsemen mounted on *yali* lions. One represents the Narsingh Avatar. In some cases the *yali* is supported by elephants. Within is a court 100 ft. long from E. to W. and 62 ft. broad from N. to S. On the S. side are numerous Kanarese inscriptions. S. of the temple is a large dharmasala with sixty-two pillars, on which are curious reliefs of female monkeys and dwarfs. On the right of the entrance is a platform with thirty-nine shorter pillars. These are also carved with curious representations of monkeys, their heads crowned with two small figures of gods. The third temple is some 20 yds. N. of the car.

An hour or so may well be spent in the solitude of these beautiful

ruins. Any one who may wish to ascend the hills above Anagundi, on the left bank of the river, for the sake of a general view over Vijayanagar, can cross the Tungabhadra in a circular basket-boat, such as were used on the Tigris and Euphrates 2500 years ago, and are still so used. The Matanga Temple affords a fine general view of the ruins. The ruins at Hampi have been officially surveyed, and a full account of them is contained in the Report of the Archæological Department of the Southern Circle, Madras, for 1912-13.

93 m. from Gadag Jn., Bellary station (R., D.B.). — A municipal town and headquarters of district of same name (pop. 42,117). Formerly an important military station; now garrisoned by a single company of the Indian infantry regiment quartered at Cannanore (p. 652). A spur from the Sandur range runs along the S. side of the Cantonment, and extends E. to Budihal, 8 m. distant, where it abruptly terminates. A high point in this range opposite the fort is called the *Copper Mountain*, the height being 1800 ft. above the plain and 3285 ft. above the sea. Excavations are still to be seen in it; these are said to be the remains of mines worked by order of Hyder 'Ali, but abandoned in consequence of the expense exceeding the profit. Hematitic iron ore is found in large quantities, some possessing magnetic properties.

The *Fort*, built on a bare granite rock of semi-elliptical form, rises abruptly from the plain to the height of 450 ft. The rock is defended by two distinct lines of works, constituting the lower and upper forts, both built of granite. In the upper one stands the citadel, which is reputed to be of great antiquity. Several tanks or cisterns, partly artificial, exist in the rock, and hold rain-water.

Under the wall at the E. gate is a tomb, built in the Muhammadan style, but said to cover the grave of a French engineer. The tradition is that when Hyder Ali took possession of Bellary in 1768, he employed this man to build the upper and lower forts, and then hanged him. A similar story is told of the Hosur fort in the Salem District, but with Tipu Sultan and a British officer, who was his prisoner, as the persons concerned. The forts came into the possession of the British in 1800, in which year the Nizam made over to the E.I. Company the districts of Kurnool, Cuddapah, and Bellary, which had been ceded to him after the fall of Seringapatam in 1799, in lieu of payment for the subsidiary force maintained at Hyderabad. The heat at Bellary in April and May is very great. Many of the Moplah (p. 649) prisoners captured after the rising in Malabar in 1921 were interned here. Besides the ruins at Hampi, there is much to be seen in the Bellary District. A branch line runs, 34 m., S. to the hill fortress of Rayadrug with its Jain antiquities (rock-cut bas-relief sculptures) and three cells. Other places worth visiting are the Temple of Bhimeswara at Nilagunda, 8 m. S.W. of Harpanahalli (excellent road for 7 m.); the ruined Harpanahalli Fort; the Kalleswara Temple at Bagali, 4 m. N. of Harpanahalli; a prehistoric mound at Budi-Canive, representing the remains either of those slain in battle or of great sacrificial holocausts; the Kappagallu, known as "Peacock Hill"; and a very fine well at Tambarahalli.

16 m. W. of Bellary is the small Mahratta State of Sandur (167 sq. m. in area, with a pop. of 11,684 and an annual revenue of nearly 1½ lakhs). The first Chief settled here in 1715; the present ruler, Raja Srimant Venkata Rao, whose family name is Hindu Rao Ghor-

pade, succeeded in 1892. Included in the State is the pleasant hill station of **Ramandrug**, which can be reached by rail from Hospet (p. 584) and also by a road from Bellary, which winds along the face of the hill and is just wide enough for a motor.

123 m. **Guntakal** station. Junction for the broad-gauge line from Bombay *via* Raichur to Madras (Route 26). A branch line (metre-gauge) runs S. to Bangalore (see (b) below). Another metre-gauge line proceeds N.E. to Dronachellam (for Kurnool and Secunderabad) and thence to Bezwada.

(a) Guntakal to Dronachellam and Bezwada.

17 m. from Guntakal **Tuggali** station. Pattikonda (D.B.) (pop. 5082) is the headquarters of a Tahsildar, and is 7 m. by road to the N. of Tuggali. Sir Thomas Munro, Governor of Madras, died here on the 6th June 1827 of cholera, when on tour in the District. To his memory Government constructed a fine cut-stone well with a *mandapam*, or porch, and planted a grove of tamarind-trees around it. A new town called Munro's Square was built on this occasion, with a rampart wall all round. The wall and gates are still in a state of fair preservation. The Taluk office contains an interesting bas-relief of Munro (which is rapidly crumbling) and a very mediocre replica. Munro was known in the "Ceded Districts" of Bellary, Kurnool and Cuddapah as the "Father of the People," and many local ballads, which are still sung, were composed in his honour.

43 m. from Guntakal **Dronachellam** or **Dhone** (R., D.B.) (pop. 4158).

Pyapalli (D.B., pop. 3258) is 15 m. from Dhone, on the Gooty

road, and 11 m. from Gooty Ry. Stn. on the Madras-Raichur line. It is situated at the foot of a granite hill, and is the most elevated town in the District, being 1750 ft. above the sea-level; it serves as a sanatorium for the Kurnool District.

Dronachellam (Dhone) to Kurnool and Secunderabad.

A branch line runs from Dhone N. to Kurnool and Secunderabad.

13 m. from Dhone **Veldurti** (D.B.) (pop. 3557). 5 m. to the N.E. of Veldurti is a village called Ramallakota, where there are indications of alluvial washings and rock-working for diamonds.

32 m. from Dhone **Kurnool** (D.B.) (pop. 27,908). The headquarters of the District, and a municipal town, situated at the junction of the Hindri and the Tungabhadra. The temperature is high in April, May, and June. The old fort was dismantled in 1862. The fort wall along the River Tungabhadra and some of the bastions are still intact. There are two gates leading to the River. Troops were stationed here until 1871. The ruined Palace of the Nawabs stands on a bluff overlooking the Tungabhadra. There are several mosques and a fine mausoleum of Abdul Wahab, Subadar of Bijapur and the first Nawab, to whom the place was given in *jagir* by the Emperor Aurangzeb. These Pathan Nawabs and those of Cuddapah took a prominent part in the 18th century; they were first absorbed by the Nizam, and afterwards by Hyder 'Ali. In 1838 information reached Government that the last Nawab Ghulam Rasul Khan was engaged in treasonable military preparations on an extensive scale. The town and fort were then captured after a short fight, and the Nawab escaped to Zorahpur, a

town named after Zorah, the sister of Abdul Wahab, which lies on the S. bank of the Hindri. He was deposed in 1839. The long years of Muhammadan rule in Kurnool have left their mark in the language of the people, of whom a large proportion speak Hindustani, although the majority of them are not Moslems. An *anicut* is constructed across the Tungabhadra at Sunkesula, a village 17 m. from Kurnool, whence the Kurnool-Cuddapah Canal traverses the District *viâ* Nandyal. There are bungalows at convenient stages along the canal, and boats can be obtained between July and December on application to the Executive Engineer at Kurnool. The Government Fisheries Department has a fish-breeding farm at Sunkesula.

From Kurnool a metre-gauge line of the Nizam's State Railway runs N. (157 m.) to Hyderabad and **Secunderabad** (Route 28): direct service of trains between Secunderabad and Bangalore city (403 m.) *viâ* Dronachellam, Guntakal and Dharmavaram (see (b) p. 591) in 22 hours.

40 m. from Kurnool on this line is **Gadwal**. There is a fine palace here and several old Hindu temples. The walls of the fort, which are well preserved, are of mud. Under the Hindu Empire of Vijayanagar (1185-1565) the Poligars of Gadwal were important rulers. The town has formed part of the Nizam's Dominions since 1724.

74 m. **Mahbubnagar** (pop. 9991), is an important commercial centre, and headquarters of the district of that name.

97 m. **Jadcharla**. The station is surrounded by rocky hills in which bears and panthers can be had. Motor-bus service, 25 m., to Nagar Kurnool; the road continues to Amrabad, where big game is plentiful. Arrangements

for transport can be made at Jadcharla with the proprietor of the motor-bus service: Govt. R.H. at Manamora. Licences must be obtained from the office of the Conservator of Forests at Hyderabad.

120 m. **Shadnagar**, 2102 ft. above sea-level, is the highest station on the Nizam's Ry.

152 m. Hyderabad (metre-gauge) station; thence 5 m. to **Secunderabad** Junction (p. 568) for the Godavery Valley line to Aurangabad (for Ellora) and Manmad (Route 4).

Dronachellam to Bezwada.

51 m. from Guntakal **Malkapuram** (pop. 1848). 7 m. to the S. of this there is a village called Allabad, a hamlet of Muni-maduga, where there are diamond mines.

66 m. from Guntakal **Betamcherla** (pop. 4131). Ruins of a rock fortress. Barytes and steatite are found in the neighbouring villages of Muddavaram, Ambapuram, and Balapalapalli. A mining lease has been granted for diamonds in Muddavaram.

81 m. from Guntakal **Panyam** (D.B.) (pop. 3464) contains a tank round which small-game shooting is fairly plentiful. A road connects it with Banganapalle, the chief town of the Muhammadan State of that name, which extends over an area of 255 sq. m., with a pop. of 36,692 and an annual revenue of nearly 4 lakhs. Nawab Saiyid Fazl Ali Khan Bahadur was born in 1901 and succeeded in 1922. There are diamond mines near Banganapalle. Excellent black-buck shooting in the State.

91 m. from Guntakal is the municipal town of **Nandyal** (pop. 18,124). There is a R.H. close to the railway station, which is

sometimes available on previous application to the Superintendent, Agricultural Department, Bellary. The Government Agricultural Farm is close by. There is also a canal bungalow. There are two big tanks separated by a road leading to the canal bungalow. The place takes its name from Nandi, the bull of Siva, to whom a temple is dedicated. There are three cotton presses and two ginning factories. There are several mission buildings.

Before reaching Nandyal the line passes through the Yerramalai Hills, and, after passing it, through the Nallamalai Hills, by many picturesque curves.

100 m. from Guntakal **Gazulapalli** (pop. 784). There is a forest R.H. Big-game shooting can be obtained in the Nallamalais on licence granted by application to the District Forest Officer, South Kurnool. Mahanandi, a place of pilgrimage with a temple and a perennial spring, 5 m. distant, deserves a visit.

133 m. from Guntakal **Giddalur** (pop. 3775). A P.W.D. R.H. and forest R.H. It is the headquarters of the Tahsildar and an S.P.G. missionary. The road from Nandyal to Giddalur runs through the Nallamalai Forest, which covers some thousands of miles and in some parts is almost impenetrable. During the war hay was obtained in vast quantities from the depths of the forest; and pressed and baled for despatch to all parts of India and Mesopotamia.

154 m. from Guntakal, **Cumbum** (pop. 6140). Varadarajamma, wife of Krishna Devarayadu, a King of Vijayanagar, is said to have constructed the beautiful tank here, by damming by a bund 57 ft. high, a gorge between two hills. It irrigates 6000 acres. There is a P.W.D. R.H. on the tank bund.

209 m. from Guntakal, is **Vinukonda** (D.B.), celebrated in Hindu mythology as the place where Rama heard of the abduction of his wife Sita: it has a striking hill with twin peaks.

260 m. from Guntakal is **Guntur** station (R.: D.B.). Motor supplies available. A metre-gauge line is under construction from Guntur, 80 m. W., to Macherla on the bank of the Kistna River. The four principal Telugu-speaking districts are Nellore, Guntur, Godavari (Rajahmundry) and Kistna (Masulipatam). Guntur was important in the 18th century as a capital of the 4 N. Circars (Sirkars). Under the treaty of 1766 the Murtazanagar or Guntur circar was given to Basalat Jang, the brother of Salabat Jang and Nizam Ali. He was never without a French officer in his service. There are many old French tombs in the cemetery. Guntur is now an important American Mission station; also a leading cotton mart and centre of the tobacco trade: there are several cotton presses. The Buddhist remains at Amaravati (p. 519) are 22 m. by road from Guntur. The railway crosses the Kistna by a long bridge (p. 520), just below the irrigation dam, before entering

279 m. **Bezawada** (R.) D.B. on the main line between Madras and Calcutta (Route 25, p. 518). Except during the monsoon months, motorists can cross the river by the anicut.

(b) Guntakal to Bangalore.

Passengers for Bangalore by the Bombay-Madras mail (Route 26) change at Guntakal to the metre-gauge. From Secunderabad there is a direct service to Bangalore without change at Guntakal (see p. 590).

43 m. **Anantapur**, headquarters of a District formed in 1882. There

are interesting antiquities at Penukonda ("Big Hill"), the residence of the Vijayanagar Princes as early as 1354. The King and his court fled there after the disastrous Battle of Talikota, 1565. The remains of the citadel of the fort are on the top of the hill, 3000 ft. high. The buildings have been described in the Report of the Archaeological Department, Southern Circle, Madras, for 1912-13. In the compound of the Sub-Collector's office is a fine lofty *stambha* or stone pillar, some 40 ft. high and of elegant proportions. When the "Ceded Districts" (Bellary, Kurnool and Cuddapah) were made over to the E. India Company by the Nizam in 1799 (p. 588), Sir Thomas Munro was appointed First Principal Collector: and Anantapur contains several buildings associated with his name. A tablet on the Collector's guest-house records that he once lived there; and the Court House, in which there is an engraving of Shee's portrait, is known as Munro Hall.

Near Kalyandrug, 36 m. W.S.W. of Anantapur and 22 m. E. of Rayadrug railway station (on the branch line from Bellary), there are innumerable prehistoric remains, cairns, and ruined cell-tombs.

Bus services from Anantapur to Kalyandrug, S.W. and to Tadpatri, N.E.

63 m. from Guntakal is **Dharmavaram** junction (R.). The town is famous for its silk saris. Branch of the M. & S.M. Ry. to Pakala Jn. (142 m.) on the Renigunta-Katpadi line (Route 26, p. 542). 3½ m. from the Mulakalacheruvu station (65 m.) on the Pakala line is the picturesque Sompalle Temple, with a stone car and beautiful monolithic flagstaff 50 ft. high.

113 m. from Guntakal, **Hindupur** (R.). At Lepakshi, 9 m. E. of Hindupur, is a large temple to Virabhadra (a form of Siva), with a

colossal stone bull about 15 ft. high and 27 ft. in length standing near it. The temple is in the Vijayanagar style of architecture, and has an inscription ascribing to its building the date 1538 A.D.

152 m. **Dodballapur**. 12 m. to the E. of this station rises

Nandidrug, a strong hill fort 4851 ft. above sea-level. It was thought impregnable by Tipu Sultan, being inaccessible except from the W., and there strongly fortified. It was taken, however, by General Medows on the 19th October 1791, with the loss of only thirty killed and wounded, chiefly by the tremendous masses of granite rolled down the rock on the heads of the assailants. The rock called Tipu's Drop, projecting from the fortress, has a precipice of 1000 ft. clear below it.

Nandi (on the Bangalore-Bowringpet Section of the Mysore Railways, p. 607) is the ry. station for visitors to the Nandidrug Hill. From the station to the foot of the Hill the distance is about 2½ m.: from a village there, named Sultanpet, to the top there is a flight of about 1175 steps: chairs can be obtained for the ascent and descent (Rs.2-8-0 each way); coolies available for luggage; there is also a bridle-path. In the hottest months of the year the summit is cooler than Bangalore, and the climate is very nearly equal to that of Coonoor in the Nilgiris (p. 641). There are five furnished bungalows and an hotel on the hill. The place is under the management of the Mysore State; and the Superintendent, Government Gardens, Lal Bagh, Bangalore, will, on application, arrange for accommodation and food. There are sheds for motors at the foot of the hill.

174 m. from Guntakal is **Bangalore** junction (Route 31, p. 598).

ROUTE 31.

POONA by **Londa** Junction to **Dharwar**, **Hubli** Junction, **Harihar**, **Birur** (for **Shimoga** and the **Gersoppa Falls**), **Banavar** (for expedition to the temples at **Halebid** and **Belur**, also to the **Hill of Indrabetta**, near **Stravana Belgola**), **Arsikere**, **Tumkur** and **BANGALORE**.

The Poona-Bangalore mail proceeds as in Route 27 to (277 m.) **Londa** Junction (p. 552). From **Londa** the line runs E. to

321 m. from Poona and 350 m. from Bangalore, **Dharwar** station (R., D.B., 1½ m.). This was once an important centre, being the old headquarters of the Southern Mahratta Railway. **Dharwar** is a large open town on the watershed, but 20 m. inland from the edge of the ghats, with a population of 34,750. Hdqrs. of the District of **Dharwar**. The S.M. Railway headquarters were removed to **Madras** in 1908 on amalgamation with the **Madras** Railway; but the District Traffic Manager, and other officers, still reside at **Dharwar**. The District Jail is partly organised for juveniles on the Borstal system, the first of its kind in W. India. A mental hospital has also been established.

On the N. is the *Fort*, which was taken from the Mahrattas by **Hyder 'Ali** in 1778, and stood a siege in 1789 from a British force co-operating with the Mahratta army under **Parshuram Bhao**. It next belonged to **Tipu**; and one of his ablest Generals, **Badr-ul-zaman**, with 7000 regulars and 3000 irregulars, having thrown himself into it, defended it with great spirit. After a protracted siege of twenty-nine weeks **Badr-ul-zaman** surrendered on condition of being allowed to march

out with all the honours of war. The allies took possession of the fort on 4th April, and the Mahrattas attacked **Badr-ul-zaman** as he was marching away, wounded him, made him prisoner, and dispersed his force. Little remains of the fort, which is occupied by the Civil Hospital and a number of bungalows and smaller houses.

The *English Church* is ¼ m. W. of the D.B., and was built in 1886. A chaplain, who resides at **Hubli**, has charge of **Dharwar**, **Hubli**, **Gadag**, **Bijapur** and **Castle Rock**. There is also a *Roman Catholic Church*, built in 1845. The last detachment of regular troops was removed in 1884, and the site of the old Cantonment is occupied by police lines.

The **Karnatak**¹ (Carnatic) College is now a first-grade college in Arts and Science affiliated to the **Bombay University**. It was originally opened at **Dharwar** in 1917. The large building, so conspicuous from the train, which formerly held the Ry. Offices, was purchased in 1920 by the Government of **Bombay** for the use of the College. Besides this college there are Training Colleges for Teachers of both sexes, and a High School.

Sixty yds. from the D.B. is an obelisk to the memory of **Mr St John Thackeray**, Principal Collector and Political Agent, Southern Mahratta Doab, killed in the insurrection at **Kittur**, 23rd October 1824; and of **Mr J. C. Munro**, Sub-Collector, who died of wounds received at the reduction of that place. **Thackeray** was an uncle of the novelist.

Dharwar is connected by a metalled road (105 m.) with **Karwar** (D.B.) on the sea-coast, hdqrs. of the **Bombay** district of **North Kanara**; there are four

¹ The term "Karnatak" (Carnatic) is applied in the **Bombay** Presidency to the three Kanarese-speaking districts of **Dharwar**, **Bijapur** and **Belgaum**.

D.Bs. on the road, which crosses the Sahyadri range by the Arbail pass, 12 m. S. of Yellapur (D.B.), 55 m. from Karwar. The road runs through Hubli (12 m.).

Nargund is not easily accessible, but its compact hill-fort rising straight out of the plain is a conspicuous object on clear days from Dharwar to the N.E. and from the Gadag-Hotgi Railway (Route 29) to the W. It was one of the strongest forts in the Karnatak. During the Mutiny the Chief of Nargund, Bhaskarrao Appasaheb *alias* Baba Saheb, rose and in the last week of May 1858 murdered Mr Manson, Political Agent of the Southern Mahratta country, by night at a village N. of Nargund and had his head affixed to the gate of the town. The fort was afterwards stormed by British troops, the Chief taken and executed, and his State annexed. The head of Mr Manson was buried in Nargund, but was afterwards exhumed and buried in Bombay cemetery, a cenotaph only remaining in the town of Nargund. After ceasing to be of military value Nargund Fort became a favourite haunt of panthers.

334 m. **Hubli** junction station (R.). Pop. 69,206. The chief centre of the cotton trade in the Southern Mahratta country. Contains the workshops for the metre-gauge rolling stock of the M. and S.M. Railway system. Has a spinning and weaving mill and numerous cotton gins and presses. A line runs E. to (36 m.) Gadag junction, for Hospet, Bellary, and Guntakal Junction (Route 30).

415 m. from Poona is **Harihar** station (R.), on the right bank of the Tungabhadra. Good D.B., convenient for motorists from Poona to Bangalore. In 1868 a very fine bridge was constructed over the river. An inscription on

copper has been found here of the 7th century, and there are several of the 12th. The fine temple was erected in 1223. In 1268 additions were made by Soma, the founder of Somnathpur in the Mysore District (p. 601).

424 m. **Davangere**. Cotton and grain trade with several cotton ginning factories.

453 m. **Chik Jajur Jn.** Branch, 21 m. N.E., to Chitaldrug (D.B.) which is a cotton trade centre and possesses an interesting fortified hill.

471 m. **Hosdurga Road Stn.** From here may be visited the great Marikanave Lake, formed by a dam, 1200 ft. long and 140 ft. high, across the Hagari Valley, and covering 35 sq. m. There is a penstock with a fall of 60 ft. by the dam. This work was inaugurated by Sir K. Seshadri Iyer (p. 599).

495 m. **Birur** junction, branch line to **Tarikere**, 16 m. (light ry. to Narasimharajapura), and **Shimoga**, 38 m. (R., D.B.), the headquarters of the N.W. District of the Mysore State. Motor services from Shimoga, N.E. to Harihar (see above), and S.W. through rich forests to Agambli and Mangalore (see p. 652).

Shimoga is the most convenient starting-point for the **Gersoppa** or **Jog Falls** of the Sharavati, distant 65 m., the stages, each with a R.H., being Ayanur (15 m.), Anantpur (15 m.), Sagar (15 m.), Talguppa (10 m.), Gersoppa Falls (10 m.). There is a private motor-bus service; and on previous intimation to the Proprietor, Motor-bus Service, Shimoga, a motor-car can be hired at 8-10 ans. per mile, with halting charges of Rs.10 per day. Supplies must be taken for the journey. The road is pretty and interesting, and passes through much fine bamboo and tree forest.

Some miles above the falls the road to the Mysore bungalow on the left bank turns down to the Sharavati, which is here an extremely beautiful, broad, deep stream flowing between high finely-wooded banks, while the main Honavar road continues directly on to the Bombay bungalow at Kodkani, on the right bank close to the Raja Fall.

There are in all four falls, which have been called the Raja or Horse-shoe, the Roarer, the Rocket, and La Dame Blanche. In the first of these the water in considerable volume leaps sheer down a height of 829 ft., measured by line, and falls into a pool 132 ft. deep. The spectator can look right down into this abyss. Viewed from below and at some distance this fall contrasts with magical effect with the next, the *Roarer*, in which the water rushes with less abruptness, foaming down a tortuous channel into a cavern or cup, which turns it into the rift of the Raja below. The name given to the third fall, at a little distance to the S., the *Rocket*, is very appropriate. It continually shoots out in jets of foam, which burst like fire-rockets into showers of glittering drops. The *Dame Blanche*, nearest the S. end of the cliff, is exquisitely beautiful, and streams in a succession of lace-like cascades over the sloping surfaces of the rock wall underneath it. The finest view is no doubt that from the Mysore side (though that from the front of the Kodkani R.H. on the N. bank is very beautiful also), as from it the black chasm into which the Raja and Roarer leap and pour is fully seen, as well as the curving face of the cliff down which the Rocket and Dame Blanche shoot and stream. A particularly fine view is that from Lady Curzon's seat and Watkin's platform to the W. of the Mysore bungalow; and no one should fail to make the expedition to the foot of the falls, though the paths are steep for returning. A splen-

did surge of spray constantly rises from the pool into the chasm and the recess of the falls, and in the afternoon is touched with rainbow tints. The whole of the deep recess into which the waters are hurled is covered with fine trees and dense undergrowth (full of leeches!), and the river disappears to the W. between the dark walls of the gorge through which it hurries to the sea. In its full glory there are few more wonderful effects of nature to be seen anywhere in the world; but it must be remembered that in the dry season the amount of water in the falls becomes very small, and that in the rains the whole of the recess and the falls, or at least the chasm of the Raja, may be shrouded for hours, and perhaps even days, in thick impenetrable mist. The best time for a visit is probably early in the cold weather, as soon as the rains have ceased.

The Queen of Gersoppa, called by the Portuguese the *Rainha da Pimenta*, or Pepper Queen, was a great dignitary in the 17th century. Her subjects were chiefly Jains, by whom the nearest village to the falls is at present almost entirely inhabited. Among the ruins of the city are two ordinary Jain temples.

513 m. from Poona, **Banavar** station.

The renowned ruins of Halebid lie 18 m. S.W. from this point by road, past *Jyavagal* (12 m.). 10 m. beyond in the same direction is *Belur*. A pleasant round may be continued from Belur to Hassan (24 m.), Chennarayapatnam (18 m.), for Sravana Belgola (8 m.), and from Chennarayapatnam to Arsikere Ry. Stn. (32 m.) Hassan is on the branch line from Arsikere (p. 597) to Mysore City. Motor-bus services between Belur and Hassan, and between Hassan and Sakleshpur, where there are several coffee and cardamom estates.

At **Jyavagal** there is a temple dedicated to Narsingh, and built entirely of *balapam*, or pot-stone. "It is highly ornamented after the Hindu fashion, and on the outside every part of its walls is covered with small images in full relieve."

Halebid¹ (R.H.), named from the Kanarese words *hale*, "old," *bidu*, "capital," is a village on the site of Dorasamudra, the capital of the Hoysala Ballala Kings. It was founded early in the 12th century, but was rebuilt in the middle of the 13th by Vira Someswara, and some inscriptions represent him to be the founder. Attacked by leprosy, he withdrew to the neighbouring Hill of Pushpagiri ("Mountain of Flowers"), where he was instructed to erect temples to Siva to obtain a cure. The Muhammadan General Kafur took the city in 1310, and plundered it of immense wealth. In 1326 another army of Muhammadans carried off what remained and destroyed the city. The Raja then removed to Tonnur.

There are two most remarkable temples remaining. The northernmost of these, the **Ketaresvara**, is the smaller of the two, and was a miracle of art. Unfortunately a tree took root in the vimana, or tower, over the sanctuary, and, dislodging the stones, rendered much of the temple a heap of ruins. The temple was star-shaped, with sixteen points, and had a porch that from base to top "was covered with sculptures of the very best Indian art, and these so arranged as not materially to interfere with the outlines of the building." It was when intact the finest specimen of Indian art in existence.

The second temple, the **Hoysaleswara** ("Lord of the Hoysalas"), is much larger than the Ketares-

vara. It stands on a terrace, 5 ft. 6 in. in height, paved with large slabs. The temple itself is 160 ft. from N. to S. by 122 ft. from E. to W., and beyond its walls there is a clear margin of platform all round of about 20 ft. The height from the terrace to the cornice is 25 ft. It is a double temple, one half being sacred to Siva, and the other to his wife. Each half has a pavilion in front containing the *Basava*¹ *Nandi*, or bull. The larger of the two is 16 ft. long by 7 ft. broad and 10 ft. high, the animal being represented kneeling.

Some of the pillars in the inner part of the temple are of black hornblende, and have a dazzling polish. Fergusson says: "Some of these friezes are carved with a minute elaboration of detail which can only be reproduced by photography, and may probably be considered as one of the most marvellous exhibitions of human labour to be found even in the patient East." He adds: "Here the artistic combination of horizontal with vertical lines, and the play of outline and of light and shade, far surpass anything in Gothic art. The effects are just what the mediæval architects were often aiming at, but which they never attained so perfectly as was done at Halebid." In the friezes of sculptured animals which surround the building the succession is always the same, the elephants being the lowest, next above them the *shardulas* (or conventional lions), then the horses, then the oxen, then birds. Fergusson places Halebid Temple and the Parthenon as the two extremes of architectural art, and says (*Ind. Arch.*, I, 449): "It would be possible to arrange

¹ Basava was founder in the 12th century of the Lingayat Saivite sect in S. and W. India. The members, who are vegetarians, admit the equality of women with men, allow widow marriage, and disregard Brahman sanctity.

¹ See Fergusson's *Ind. Arch.*, I, 442.

all the buildings of the world between these two extremes, as they tended towards the severe intellectual purity of the one, or the playful exuberant fancy of the other; but perfection, if it existed, would be somewhere near the mean." A whole day may well be devoted to the leisurely study of the wonderful work on these temples, but admiration for them should not cause neglect of the group of extremely beautiful Jain Bastis at the farther end of the village.

Belur (or Baillur) (R.H.) stands on the right bank of the Yagachi (pop. 2859). In the Puranas and old inscriptions it is called Velapura, and is styled the Southern Benares. Here is the famous temple of Chenna Kesava, erected and endowed by the Hoysala King, Vishnu Vardhana, on exchanging the Jain faith for that of Vishnu in the beginning of the 12th century. The carving with which it is decorated rivals in design and finish that of Halebid, and is the work of the same artist, Jakanacharya. The image of Chenna Kesava is said to have been brought from the Baba Budan Hills, but that of his goddess was left behind, which obliges him to pay her a visit there at stated intervals. The *Great Temple* stands within a high wall which surrounds a court 440 ft. by 360 ft. On the E. front are two fine gopurams. In this court are, besides the *Great Temple*, four or five smaller ones. "The *Great Temple*," says Fergusson (*Ind. Arch.*, I, 439), "consists of a very solid vimana, with an *antarala*, or porch; and in front of this a porch, or mahamantapam, of the usual star-like form, measuring 90 ft. across. . . . The arrangements of the pillars have much of that pleasing subordination and variety of spacing which is found in those of the Jains; but we miss here the

octagonal dome, which gives such poetry and meaning to the arrangements they adopted. Instead of these we have only an exaggerated compartment in the centre, which fits nothing, and, though it does give dignity to the centre, it does it so clumsily as to be almost offensive in an architectural sense." The windows to the porch are twenty-eight, and all different. Some are pierced with star-shaped conventional patterns, and with foliated patterns between. Others are interspersed with mythological figures, as the Varaha Avatar. The base is very richly carved, and is supported on carved elephants. Fergusson says (*Ind. Arch.*, I, 440): "The amount of labour which each facet of this porch displays is such as never was bestowed on any surface of equal extent in any building in the world; and though the design is not of the highest order of art, it is elegant and appropriate, and never offends against good taste. The sculptures of the base of the vimana are as elaborate as those of the porch, in some places more so; and the mode in which the undersides of the cornices have been elaborated and adorned is such as is only to be found in temples of this class." The carving at Belur is more graceful and finer than that at Halebid, and many of the figures on the exterior are extremely beautiful.

523 m. from Poona, *Arsikere* station (R.). There is a beautiful temple here, built by Ballala II. in the 12th century A.D. Branch of Mysore Railways to Hassan (R.), 29 m., and to Mysore City, 103 m. (p. 607). From Hassan there is a motor-bus service to Belur (p. 595).

32 m. S. from Arsikere is the ancient town of *Chennarayana*. The fort was built subsequently, and Hyder 'Ali added

the wet moat and traverse gateways. The temple was erected in 1600.

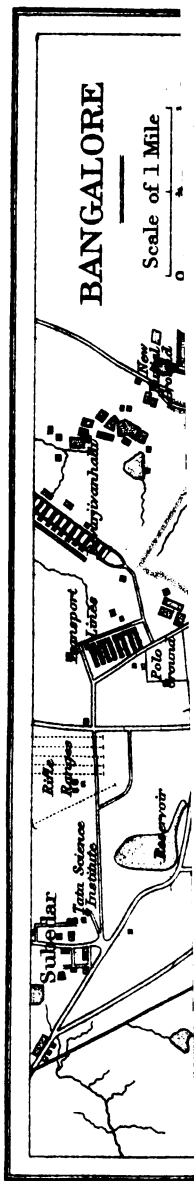
8 m. S.E. again is **Sravana Belgola**. Bhadra Bahu, a Jain sage who died here in the 4th century B.C., was a *Sruta kevala*, or immediate "hearer," of the six disciples of Mahavira, founder of the Jain sect. The chief attendant of this worthy is said to have been the famous Emperor Chandragupta, or Sandracottus, who abdicated to live the life of a recluse with him. These events are confirmed by inscriptions on the rock of very great antiquity. The grandson of Chandragupta is said to have visited the spot with an army, and from his camp arose the town of Sravana Belgola, or Belgola of the Sravans = Jains. Near the town are two rocky hills — *Indrabetta* and *Chandragiri*. On Indrabetta, reached by a steep, narrow flight of steps going straight up the steep slope of the rock, is a colossal statue of Gomata Raya, 70 ft. 3 in.¹ It is nude, and faces the N. The face has the calm look usual in Buddhist statues. The hair is curled in short spiral ringlets all over the head. From the knees downwards the legs are unnaturally short; the feet rest on a lotus. Ant-hills rise on either side, with a creeping plant springing from them which twines round the thighs and arms. These symbolise the deep abstraction of the sage, which allows ants to build and the plants to climb around him unnoticed. Though certainly 1000 years old, and probably 2000, the stone looks as fresh as if newly quarried: its preservation is due to its being profusely anointed at intervals of 25 years. Within the enclosure are 72 small statues, of like appearance, in compartments. An inscription on the front of the colossus states that it was erected

by Chamunda Raya, who is said to have lived 60 B.C. The most interesting inscriptions are cut in the face of the rock at Indrabetta in ancient characters 1 ft. long. On Chandragiri there are fifteen Jain temples, making clusters of the kind known as Bastis, and a number of stone lamp shafts (see 2, 74 of Fergusson's *Indian Architecture*).

583 m. from Poona, **Tumkur** station (R.) (pop. 14,246). 10 m. N.E. is a health resort on the Devarayadurga hills. At Kunigal, 24 m. S., connected by motor-bus, is a stud farm.

626 m. **BANGALORE City** * junction station (altitude 4000 ft., lat. 12° 57', long. 77° 37'). The railway runs on S.W. to Mysore City (Route 32 (a)); N. to Guntakal and Secunderabad (Route 30), and E. to Bowringpet and Jalarpet for Madras (Route 32 (b)). A loop light ry. runs *via* Chikballapur and Kolar (p. 607) to Bowringpet. The Cantonment station lies 2 m. N.E. of the city station. The name is literally "the town of bengalu," a kind of bean. The State of Mysore, of which Bangalore is the capital, is the third largest in all India, and comprises an area of 29,528 sq. m. with a population of 5,978,892, and an annual revenue of nearly 3½ crores. The ruling family was established as such early in the 15th century, was ousted by Hyder 'Ali, and was restored by Lord Wellesley after the fall of Seringapatam in 1799, in the person of the grandson of the deposed Prince, a child of five years of age. The conduct of the Maharaja, Krishna Raja Wadiyar, and the mismanagement of the State, led to the assumption of the administration by the British Government in 1831, under treaty stipulation of 1799. Various applications of the Maharaja for the restoration of powers to him were rejected; but in 1866 it was

¹ There are similar colossal images at Karkal and Venur near Mangalore (p. 653).



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decided to recognise his adoption of Chama Rajendra as his heir, and to restore the State to him should he prove fit. Maharaja Krishna Raja Wadiyar died in 1868, and in 1881 the rendition of the State to Maharaja Chama Rajendra Wadiyar was carried out, the Cantonment area of 13½ sq. m. being assigned to the British Government. The late Maharaja proved an excellent ruler, and died prematurely in 1894. He was succeeded by the present Maharaja, Col. H.H. Sri Sir Krishna Raja Wadiar Bahadur, G.C.S.I., G.B.E., who was born in 1884 and received full powers in August 1902. During his minority, his mother, H.H. the Maharani Regent, C.I., carried on the administration with a Council of Regency, Sir K. Seshadri Iyer being Diwan. The next Diwan, Sir Krishna Murti, K.C.I.E., was descended from Diwan Purnaiya (p. 605).

The **Cantonment**¹ (pop. 118,940) and **City of Bangalore** (pop. 118,556) stretch from the Maharaja's Palace on the N., 6500 yds., to the Koramangala Tank on the S., and an equal distance from the *Petta* on the W. to the Sappers' Practice-ground on the E. Bangalore proper lies S. of the Dharmambudhi and Sampangi Tanks, which lie in the N.W. and E. corners of the *Petta*, or town. Beginning with the Cantonment (which is the largest in S. India and the hdqrs. of a second-class military district), and taking the noticeable things in order from N.W. to S.E., the first building is the **Maharaja's** handsome **Palace**. 2 m. N. of the Palace is the **Indian Institute of Science** (a research institute for graduates), founded by the munificent liberality of the well-known **Tata** family of Parsi merchant Princes, which has attained a world-wide reputation. There are about 50 students. S.E. of this 850

yds. is the railway station, and 300 yds. S. of that again is *Miller's Tank*, which communicates by a small stream with the much larger *Ulsoor Tank* on the E. edge of the Cantonment. Along the N. side of the Cantonment are the pleasant suburbs of *Cleveland Town*, *Fraser Town*, and *Richards Town* (a modern extension), in which are some neat residences, also a large factory of the Peninsular Tobacco Co. St Xavier's (Roman Catholic) Church, a Wesleyan Church, and the (Anglican) Church of St John, are in Cleveland Town. In St John's cemetery is the grave of General J. W. Cleveland, who died in 1883 in his 92nd year, after a service of 75 years in the Madras Army. The quarters of the famous regiment of Madras Sappers and Miners are at the E. corner of the bazar adjoining the village and large tank of *Ulsoor*.

S. of the Sapper lines are the British Infantry Barracks, and then in order along the N. side of the great Parade-ground, St Andrew's Kirk, built 1864, the Main Guard, the Y.M.C.A., the Bowring Civil Hospital, and the Lady Curzon Women's Hospital. Directly S. of Ulsoor are the Artillery Barracks, and S. again of them the Cavalry Barracks, the old Cemetery, the Mounted Parade, the Artillery Practice-grounds, and the new Army Y.M.C.A. buildings, the foundation-stone of which was laid by Lord Hardinge.

N.W. of the Artillery Barracks is *Trinity Church*, which contains a half-length statue in white marble, by MacDowell, R.A., to General Clement Hill, who served through the Peninsular campaigns under his brother Lord Hill, and when commanding the Mysore Division died on the 20th of January 1845 while on a pleasure trip to the Falls of Gersoppa. W. of Trinity Church are the *Wesleyan Chapel*, the Public Offices, which

¹ Morris's Guide to Bangalore can be recommended.

include the offices of the Collector and District Magistrate and of the Police Supt., the Resident's Treasury, etc., the *Mayo Hall*, which contains the municipal office and the *Gymkhana*, standing in the General Parade-ground, which is more than 1 m. long from E. to W. A little S. of its centre are St Joseph's College and the Imperial Bank, and S.E. of that again the *Roman Catholic Cathedral* and *All Saints' Church*.

S. of the W. end of the Grand Parade-ground is *St Mark's Church*, in which is a tablet to Lieut.-Col. Sir Walter Scott of Abbotsford (the second baronet), who died at sea in 1847, aged forty-six. To the W. of this is the *Cubbon Park*, the fashionable afternoon resort. In this are the Museum, and the Sir Seshadri Memorial Hall, where the Mysore Government Public Library is located. In the vestibule are a slab with twelve Persian stiches, brought from Tipu's Palace in the fort, and a figure of a Jain deity with superb carving round it. In the large room adjoining there is a valuable collection of geological specimens. Upstairs are stuffed animals, butterflies, and Indian ornaments and dresses, and a most remarkable collection of fishes. N.E. of the Museum is the Memorial Statue of the Queen-Empress, unveiled by King George, then Prince of Wales, in 1906. Farther N. is a statue of King Edward; and W. is a fine building 525 ft. long which contains the *Public Offices*, and in front of them a good statue of Sir Mark Cubbon, Commissioner of Mysore from 1834 to 1861. The *Residency* is about $\frac{1}{2}$ m. N. of the Public Offices. To the E. of it are the Post Office and the Telegraph Office.

The city of Bangalore proper has an area of only 9.76 sq. m. The *Petta*, as it is called, was until recent times surrounded by a deep

ditch and thorn hedge. There is an excellent market between the Fort and Mysore Gates. The Brahman quarter is called Siddi Katte. The streets are somewhat narrow and irregular, but scattered about there are well-built and imposing mansions belonging to wealthy inhabitants. The grain-market, *Taragu-petta*, and cotton market, *Aravale-petta*, present busy scenes of traffic.

The *Fort* is due S. of the *Petta*. It is 2400 ft. from N. to S. and 1800 ft. from E. to W., and could never have been a strong place against European troops. It is of an oval shape, with one gateway now remaining—the Delhi Gate on the N. face opposite the *Petta*. The Delhi Gate is handsomely built of cut granite. When Lord Cornwallis, on the 21st March 1791, determined to storm the place, there were five powerful cavaliers (Wilks, *Historical Sketches of the S. of India*, 3, 123), a *faussebraye*, ditch, and covered way, but in no part was there a perfect flanking defence. The garrison, however, consisted of 8000 men under Bahadur Khan, and there were besides 2000 regular Infantry in the *Petta* and 5000 irregular. In addition to all, Tipu himself, with an army far superior in numbers to that of Lord Cornwallis, was prepared to take advantage of any error on the part of the besiegers. The *Petta* had been previously taken by the British on the 7th of March, with a loss on their part of 131 killed and wounded, and on the part of the Mysore garrison of upwards of 2000 men. The assault took place at eleven at night, and until the Kiladar fell a determined resistance was made. Tipu's camp that night was at Jigni, 6 m. to the S.W., and at nightfall he moved up within $1\frac{1}{2}$ m. of the fort; but the spirits of the assailants overcame all difficulties, and the fort was

captured, after a severe struggle, in a few hours.

In the centre of the fort is the arsenal, and there are some remains of *Tipu's Palace*. There is a small temple near the Mysore Gate. The ramparts of the walls deserve a visit. Outside the N.W. corner of the fort is the fine Victoria Hospital, maintained by the State. To the W. is the Minto Ophthalmic Hospital.

1½ m. to the E. of the Petta and fort is the *Lalbagh*, a most beautiful garden, said to have been laid out in the time of Hyder 'Ali. There is a fine collection of tropical and sub-tropical plants, and a large collection of wild animals in cages.

In consequence of the prevalence of plague in Bangalore several modern extensions, with pretty isolated houses, small and large, have been built through the encouragement of the Mysore Government to the S.W., S.E., and N.W. of the city—viz., *Chamarajapet*, *Basavangadi*, *Sankarapuram*, and *Malaswaram*, and are well worth a visit as constituting a new and enlightened departure in India.

ROUTE 32.

BANGALORE to

(a) *Falls of the Cauvery, Seringapatam, and Mysore City*, and

(b) *Bowringpet* (for *Kolar Gold Fields*), *Jalarpet Junction*, *Vellore*, *Arcot* and *Arkonam Junction* (for *Madras*).

(a) *The Falls of the Cauvery, Seringapatam, and Mysore City*.

A metre-gauge line of the Mysore State Ry., runs S.W. from Bangalore to (86 m.) Mysore City.

28 m. *Closepet* (pron. by Indians *Kalispet*) is named after Sir Barry Close, Resident in Mysore from 1799 to 1801. It was founded in 1800 by the Diwan Purnaiya to secure the road which passed at this point through dense jungle. The place is also known as *Ramgiri* from the neighbouring hill.

46 m. *Maddur* * station (R.) was formerly an important place, but suffered heavily during the wars with Tipu Sultan. There are two large *Vaishnava* temples here, sacred to *Narasimha Swami* and *Varada Raja*, the "Man-Lion" and the "Boon-giving King." A fine brick bridge with seven arches, built in 1850, spans the *Shimsha*, on the right bank of which the town is built.

Tongas and *Jhatkas* to *Sivasmudram* (30 m., see p. 602) can be procured at *Maddur* station upon giving 24 hours' notice to the Transport *Jamadar* (R.5 a place).

By road 17 m. S. is *Malvalli*, (D.B.), headquarters of the Taluk of the same name, and a municipal town. The Mysore-Bangalore and *Maddur-Sivasmudram* roads cross at this place. On the 27th of March 1799 General Harris defeated the army of Tipu Sultan here, with a loss to the enemy of 1000 men. On this occasion the left wing of the British was commanded by Colonel Wellesley, afterwards Duke of Wellington.

12 m. S.W. of *Malvalli* is the village of *Somnathpur*,¹ famous for the temple of *Prasanna Channa Kesava*. It is on the new direct road from Mysore to *Sivasmudram*. The temple is an elaborately-carved building, attributed to *Jakanacharya*, the famous sculptor and architect of the *Hoysala Kings*. Smaller than the temple at *Halebid*, it is perhaps more pleasing, as the three pyramidal towers or *vimanas* over the triple shrine are completely

¹ See *Fergusson's Ind. Arch.*, 1, 437.

finished. The central shrine is that of Prasanna Channa Kesava, that on the S. is sacred to Gopala, and that on the N. to Janardhana. Round the outer base are carved with much spirit incidents from the *Ramayana*, the *Mahabharata*, and the *Bhagavatha*. The end of each scene is indicated by a closed door. Around lie seventy-four mutilated statues, which once stood on the basement. There is a fine inscription at the entrance, which declares that the building was completed in 1270 by Soma, a high officer of the Hoysala State and a member of the royal family. The vestibule is in ruins, and the images are more or less damaged. There are also the ruins of a large Saiva temple, with inscriptions.

From Malvalli the road leads S. $12\frac{1}{2}$ m. to

30 m. **Sivasamudram**. 3 m. N. of the Cauvery the road turns off to the E., and conducts to the Cauvery Falls Electric Power Station, beyond the Gagana Chukki Fall. The Cauvery divides into two branches, embracing the Sivasamudram Island, about $\frac{1}{2}$ m. above the point where the main road reaches it. This island is connected with the left shore by an extremely picturesque bridge, built like that of Seringapatam, upon simple uprights of stone, at the farther end of which is situated the little R.H., near a small temple. On the up-stream side of the bridge has been constructed the curved regulator from which the channel leading to the penstock chamber takes off on the left. From the right bank the main road turns to the S. point of the island, where a similar bridge, known as the Kollegal Bridge, makes connection with the right shore in the Coimbatore District. At this point also is a regulator, by which the whole water of the stream can, if necessary, be diverted into the Western channel.

The river turns sharply above the head of the island, and flows from S. to N. past it, turning again to the E. at the junction below the Falls. These are known as the Bar Chukki Fall, on the right arm, and the Gagana Chukki, on the left arm; the former is $1\frac{1}{2}$ m. from the R.H., and the latter $2\frac{1}{2}$ m. The beds of both channels have fine trees on the banks and on the various rocky islands, which above the actual Falls are quite large. The sheer height of the Falls is 320 ft., but hardly any one of the many shoots into which they are divided has a clear leap of anything like this distance. They are spread over a considerable face of rock, and in the case of the Gagana Chukki (Western branch) and its Falls, curve round considerably to the left front. Both Falls are exceedingly beautiful when a large mass of water is going over them, and it is difficult to say which excels in picturesqueness. The foot of the Bar Chukki Fall can be reached by a long flight of slippery stone steps. The descent to the Gagana Chukki is possible on the W. bank only. On the E. bank, in front of it, are some Muhammadan shrines. A cloud of spray constantly rises from the pools below them, and at a distance may be observed overhanging the head of the Falls. The ordinary monsoon discharge is 18,000 cubic ft. per second, but the discharge of a high flood has been known to be 200,000 cubic ft. The power of the Falls is being utilised, as already explained, on the left bank, in front of the Gagana Chukki. The steel pipes, or penstocks, carry the water down a vertical height of 400 ft. to the six-teen generators, which were in 1923 able to deliver no less than 26,650 electric h.p. at the end of the receiving line, 93 m. distant, in the Kolar Gold Fields (p. 607). The scheme, initiated by Sir Ses-hadri Iyer, and designed by Col.

Joly de Lotbiniere, R.E., C.B., C.S.I., C.I.E., is one of the most remarkable of modern developments in India.

74 m. **French Rocks** station, so called from being the place where the French soldiers in the service of Hyder 'Ali and Tipu Sultan were stationed. The name of the place is properly Hirode. The fort, 2882 ft. above the sea, is 3 m. N. of the railway station.

77 m. from Bangalore is **SERINGAPATAM** station, situated inside the fort, which is built at the W. end of an island 3 m. long in the Cauvery River, 2412 ft. above sea-level (pop. including the suburb of Ganjam, 7217). The name is derived from a temple of Vishnu Sri Rangam, which is of great celebrity, and of much higher antiquity than the city.

Seringapatam¹ has a bad reputation for fever, and the night should not be passed there. By permission of the Darbar the hot hours of the day can be spent at the Darya Daulat Summer Palace. If the train service is not convenient for going on to Mysore, 9 m. distant, a carriage can be ordered from there. In 1133 Ramanujachari, the Vaishnava reformer, took refuge in Mysore from the persecution of the Chola Raja, and converted from the Jain faith Vishnu Vardhana, a famous Raja of the Hoysala Ballala dynasty. The royal convert gave him the province of Ashtagrama, including Seringapatam, over which he appointed officers called Prabhus and Hebbar. In 1454 the Hebbar Timmana obtained from the Raja of Vijayanagar the government of Seringapatam, with leave to build a fort there. His descendants governed till the Raja of

Vijayanagar appointed a viceroy with the title of Sri-Ranga-Raya. The last of these viceroys was Tirumala Raja, who in 1610 surrendered his power to Raja Wadiyar, the rising ruler of Mysore; after which Seringapatam became the capital of the Mysore Rajas, and of Hyder and Tipu, till the fort was stormed twice—viz., in 1792 and 1799—by British armies. After the 4th of May 1799 Mysore City became the capital; and then Bangalore.

The Fort stands at the Western extremity of the island, the northern, the longest, face being just a mile in extent. The breach by which it was stormed on 4th May 1799 lies only a short distance to the S.W. of the railway station, beyond a ruined mosque. On the right is an obelisk erected by the Mysore Government in 1907 to commemorate the storming by the British. Opposite it on the S. shore are two cannons buried in the ground, which mark the spot from which the assaulting column advanced. From this point the route round the W. end of the defences should be followed, as it affords fine views of the defences and of the river. Just across the railway line on the N. side is the dungeon in which the captives from Pollilore (see p. 633), including General Baird, were imprisoned. A marble tablet indicates the spot, which is reached by descending a flight of steep and narrow steps. S. of this is the Sri Ranganatha Swami Temple, and considerably to the E., across the open space which was once the Parade-ground, is the Ganga-dharieswara Temple, with the fragrant storehouse of State Sandalwood to the S. of it, occupying the site of Tipu Sultan's Palace. To the N.E. of this is the Water Gate, outside of which is a very picturesque enclosed space between walls with many stone idols and reliefs of serpents under banyan-trees. On the right of this space

¹ An excellent account of the place has been written by the Rev. E. W. Thompson, Mysore (obtainable from the Christian Literature Society).

is the spot where Tipu Sultan fell, and outside it upon the river-bank is a bridge over the fort ditch and a fine ghat built in memory of the late Maharaja. S.E. of this point, and facing the Ganjam Gate, is the Masjid-i-Ala, with two lofty minarets, built in a style very different from any known in N. India. Outside, to the N.E. of the Ganjam Gate, is the Darya Daulat Palace, and E. of it, at a distance of nearly 2 m., is the Lalbagh, with the mausoleum of Hyder 'Ali and Tipu Sultan. Just outside the Fort is the Scott bungalow, which with its furniture has been preserved by the Mysore Govt. from the time of the tragedy in 1817 when Col. Scott (Commandant of Seringapatam) is believed to have drowned himself after returning to his bungalow to find his wife and daughter dead from cholera.

The first **Siege of Seringapatam** was in 1792. Lord Cornwallis had appeared before the place on 13th May 1791, after the capture of Bangalore, but was compelled by the weather and want of supplies to fall back from it. In February 1792 the attack was made from the N.W. side of the fort from French Rocks, where an army of 19,000 European and 29,000 Indian troops, with 400 guns and a large force of Mahratta and Hyderabad Cavalry had been assembled under Lord Cornwallis. In a night attack on 6th February the town and camp on the N. side of the fort were taken, and the British force nearly penetrated into the fort with the fugitives who took refuge in it. Trenches were then opened against the place, and, General Abercrombie having arrived with 9000 additional troops from Bombay, Tipu Sultan wisely decided to submit, and did so on 23rd April at the cost of surrendering a very considerable part of his territories. The handing over of

two of his sons as hostages, which formed part of the conditions of peace, has supplied a subject for several pictures by English contemporary artists.

The second siege commenced on 17th April and ended on the 4th of May 1799, when Seringapatam was stormed. The forces under General Harris arrived before Seringapatam on 5th April, and were joined by the Bombay troops under General Stuart on the 14th. Outside the fort on the N. and S. of the Cauvery a "bound hedge" enclosed a large space. That on the N. was 1 m. to $1\frac{1}{2}$ m. deep by 3 m. long along the river, and was defended by six redoubts. Here Tipu had placed the camp of his army, consisting of 5000 cavalry and 40,000 to 50,000 infantry. The regular siege commenced on the 17th, and by the 27th the enemy had been driven out of the whole outer line of defence. By the 3rd May a practicable breach had been made in the walls, and this was attacked by a strong force of 4331 men (2494 British and 1887 Indian) under General Baird at 1 o'clock noon on the 4th. For some reason the defenders were taken by surprise, and the troops, having surmounted the outer wall within 7 m. of the commencement of the assault, turned right and left along the deep inner ditch, which some finally managed to pass. Tipu Sultan, who had hurriedly proceeded to the point of the breach, found that these troops were getting between him and the inner defences of the Palace, and therefore fell back along the N. wall, seeking to regain the Palace from that side. In front of the inner wicket gate there he was severely wounded and placed inside a palanquin, but meanwhile the wicket had been seized by the besiegers, and it had become impossible to enter it. As he lay disabled outside it an European soldier attempted to snatch off his

jewelled sword-belt, and, being wounded by the Sultan, shot him through the head. His two sons, who had been hostages with Lord Cornwallis, and his family then surrendered, and next day the eldest son, Fateh Haidar, who was commanding a force outside the fort, surrendered also. The reserve on the occasion of the assault was commanded by Colonel Wellesley, who became Commandant of the place and the troops left in it. The evening after the assault was ushered in by a storm of extraordinary violence. Tipu Sultan was buried next day in the Lalbagh Mausoleum with military honours.

The island is connected with the N. bank of the Cauvery by the Wellesley Bridge, and with the S. bank by the Periapatam Bridge, both carried on stone uprights as at Sivasamudram. An inscription on the Wellesley Bridge records that it was built between the years 1802 and 1804 and dedicated to Richard, Marquess Wellesley by the Diwan Purnaiya, the famous Prime Minister, who served with equal loyalty Hyder 'Ali, Tipu Sultan, and the British, and who died at Seringapatam in 1812. Just beyond the Periapatam Bridge is a fine canal, and following the left bank to the W. the visitor passes along the outer portion occupied by the defenders and taken from them by the British forces in the siege of 1799. Close to the bridge was Wallace's Post, captured on 26th April and held at first with some difficulty. Half a mile from it are the guns opposite the breach, and beyond these again is MacDonald's Post. Just S. of the canal is a very sacred Hindu temple at a Sangam or junction of rivers. The island was evacuated on account of its unhealthiness in 1811.

The **Darya Daulat Bagh**, a Summer Palace of Tipu Sultan just outside the E. side of the fort,

is distinguished for its graceful proportions and the arabesque work in rich colours which covers it. The W. wall is painted with a representation of the victory of Hyder 'Ali over Colonel Baillie at Polilore, near Conjeeveram (see p. 633). It had been defaced prior to the siege of 1799, but the Duke of Wellington, then Colonel Arthur Wellesley, who made this garden his residence, had it restored. It was afterwards whitewashed and almost obliterated, but Lord Dalhousie, having visited the spot during his tour in Mysore, ordered it to be repainted by an Indian artist who remembered the original. The perspective is very bad and the general effect grotesque, but the painter has succeeded in caricaturing the expression and attitude of the British soldiers, and the Frenchmen are very lifelike.

The **Lalbagh** is a garden 2 m. E. of the fort on the other side of the Ganjam suburb, which intervenes between it and the Darya Daulat. It contains the mausoleum of Hyder 'Ali and Tipu Sultan, a square building surmounted by a dome, with minarets at the angles, and surrounded by a corridor which is supported by pillars of black hornblende, a stone that is remarkable for its beautiful polish. The double doors, inlaid with ivory, were given by Lord Dalhousie. Each of the tombs is covered with a crimson pall. The whole is kept up by the Mysore State. The tablet on Tipu's tomb is in verse to this effect—
"The light of Islam and the faith left the world: Tipu became a martyr for the faith of Muhammad: The sword was lost and the son of Hyder fell a noble martyr." The inscription gives the date 1213 A.H. = 1799 A.D. In front of the Lalbagh is a simple memorial erected in 1816 by Colonel John Baillie, Resident at Lucknow, to

his uncle, Colonel William Baillie, who died in 1782, a prisoner of Tipu Sultan; and the grave of 30 British soldiers of the 33rd (now the Duke of Wellington's) Regt. who died in 1799-1800. On the way to the garden, on rising ground near the road, are memorials of the officers and men of the 12th and 74th Regiments killed in action in 1799.

In the garrison cemetery are a number of graves of officers of the Regiment de Meuron, a Swiss proprietary regiment in the service of the E. India Company, which took part in the second siege and fall of Seringapatam, and were afterwards quartered on the island.

86 m. from Bangalore is **Mysore station** * (D.B. on N. side of town), the old capital of the State (pop. 83,951), situated at the N.W. base of Chamundi Hill, an isolated peak rising to 3489 ft. above the sea. The city is built in a valley formed by two ridges running N. and S. The streets are broad and regular, and there are many substantial houses two or three storeys high, with terraced roofs. The town has a neat and thriving look, and the sanitation has been much attended to by the municipality. The Mary Holdsworth Hospital is a fine building.

To the E. are the Summer Palace, the Chamundi Vihar (residence of H.H. the Yuva Raja) and Col. Desraj Urs' mansion. To the W. are the Public Offices, with a statue of Sir James D. Gordon (who served in Mysore from 1873 to 1886 as Judicial Commissioner, Chief Commissioner, and Resident), the Maharaja's College, the University buildings and the Maharani's College. S. of the town is the fort, a quadrangular, moated enclosure of some 450 yds.; in front of it lie the Curzon Park, the Gordon Park, Nishath Bagh and the Hardinge Circle. In the centre of the town are the Sri Krishnara-

jendra Hospital, the Chamara-jendra Technical Institute, and the Lansdowne Bazar. The former Residency, now known as Govt. House, contains one of the largest rooms, without pillars, in Southern India.

The *Maharaja's Palace* in the fort faces due E. The general appearance and the outline are Indo-Saracenic; but the details of decoration are distinctly "Hoy-sala." The central dome is the dominating feature. The carvings and colour combinations are highly artistic. The Sajje or Dasa-hara Hall is an open gallery where the Maharaja shows himself to the people, seated on his throne, on great occasions. The throne is remarkable. According to one account, it was presented to the ambassadors of Chikka Deva Raja in 1699 by the Emperor Aurangzeb (Wilks, 1, 106) for their Prince. The Palace legend at Mysore is that it was originally the throne of the Pandus, and was found buried at Penukonda by the founders of the Vijayanagar Empire, Hakka or Harihara and Bukka, who were told where it was by an ascetic. It is at all events certain that it was used by Chikka Deva and his successors up to the time of Tipu Sultan, that it was found in a lumber-room when Seringapatam was taken by the British, and that it was employed at the coronation of the Raja whom they installed. It was originally of fig-wood overlaid with ivory, but the ivory has been plated with gold and silver carved with Hindu mythological figures. The magnificent new *Palace Offices* were constructed in 1925 at a cost of 4½ lakhs.

Chamundi, the hill which overlooks Mysore, is 2 m. S.E. of the fort. It is precipitous, and rises to 3489 ft. above sea-level; an excellent road, suitable for motors, 5½ m. long, leads to the top, on which is a temple. Human sacri-

fices were offered here until the time of Hyder 'Ali. Two-thirds of the way up is a colossal figure of Nandi, the sacred bull of Siva, 16 ft. high, hewn out of the solid rock—a well-executed work of the date of 1659 A.D. Chamundi is a title of the goddess Kali (see p. 80). On the top is a residence of H.H. the Maharaja.

A metre-gauge line of the Mysore State Ry. runs from Mysore City to Hassan (29 m.) and (103 m.) **Arsikere Junction** (p. 597), where it connects with the M. and S.M. Ry. line from Hubli Jn. to Bangalore (Route 31). The first stn. on this line after leaving Mysore City is **Belagula**, which is 3 m. (jhatkas available) from the Krishnaraja Sagar, a large reservoir formed by a dam (108 ft. high) across the Kaveri and constructed to store water for irrigation purposes, and to maintain a continuous flow of water at Sivasmudram for generating electric power. The place is 10 m. by road from Mysore City.

(For the motor journey by road from Mysore City to Bangalore, see pp. 224-252 of *Topee and Turban*, by Lt.-Col. Newell. John Lane, 1921.)

From Mysore City a road runs to Calicut (p. 649).

102 m. from Bangalore, **Nanjangud**, possesses a temple 385 ft. long by 160 ft. broad, supported by 147 columns. It is one of the most sacred in Mysore, and enjoys a Government grant of Rs.20,197. There is a celebrated car-festival here in March, which lasts three days, and is resorted to by thousands.

Coorg (anglicised form of "Hodagu"), of which the capital town, **Mercara**, lies 75 m. W. of Mysore, is reached by a motor service in about 6 hours. (Apply to Agent, Govt. Motor Mail Service, Mysore.) At Hunsur in Mysore, before the borders of Coorg are

reached (27 m., R.H.) are the headquarters of the breeding establishment of the famous Mysore bullocks. With them Hyder 'Ali marched 100 m. in $3\frac{1}{2}$ days to the relief of Chidambaram (p. 660) in 1781. Near Fraserpet the Cauvery is crossed.

Mercara has an old fort, which underwent a famous siege by the Raja of Coorg in 1791. The country, which had been overrun by Hyder 'Ali in 1773, was cruelly ravaged by Tipu Sultan in 1782 and 1785, and came under British rule in 1834, when Vira Raja (who died afterwards a political pensioner in England in 1863) surrendered to Col. Fraser. A Commissioner now administers the country (of which the Resident of Mysore is Chief Commissioner), and has one Assistant under him. As far as possible the Administration is on the old Indian lines. A Legislative Council was created in 1923. The area under coffee in Coorg is 41,000 acres. Coorg (1582 sq. m.) has an excellent climate except during the rainy season, beautiful scenery, magnificent forests and first-class shooting.

(b) **Bangalore City to Bowringpet, Jalarpet Junction, and Arkonam Junction (for Madras).**

Communication between Bangalore and Madras City is made by a broad-gauge line (222 m.) of the Madras and S. Mahratta Railway.

25 m. from Bangalore, **Nandi**; station for Nandidrug (see Route 30, p. 592).

44 m. from Bangalore city is **Bowringpet** (called after a former Chief Commr. of Mysore) junction for the Kolar Gold Field Railway to Ooregaum and Marikuppam (10 m.), and for the Kolar District Railway, which forms three parts of a circle, and terminates (102 m.) at Bangalore City. The Gold Field (pop. 87,723) begins 8 m. from

Bowringpet, and extends for several miles, presenting a very busy appearance, with its numerous tall chimneys, mills, shaft-heads, buildings, and bungalows of all kinds. There are five Companies at work on the Field, employing nearly 22,000 people. Nearly £658,000 are paid yearly in wages. Since mining on modern principles was begun on the Field in 1882, the mines have yielded gold to the value of over 62½ millions sterling, and have paid royalties amounting to over 3½ millions. In 1926, the production was 382,899 oz. of fine gold, of the value of £1,618,629. Since 1922 the mines have been furnished with 18,000 h.p. for mining purposes by the Cauvery Falls Power Works (p. 602).

87 m. **Jalarpet**; junction with the broad-gauge line of the S. Indian Ry. to Erode and Mangalore (Route 35).

139 m. from Bangalore is **Katpadi station** (R.).

From here (1) a branch of the S.I. R. runs S. past Vellore Town and Cantonment (6 m.) to (100 m.) Villupuram junction for Pondicherry (p. 656, Route 36); and (2) a branch of the M. and S.M. R. runs N. to (20 m.) Chittoor, Pakala, Tirupati (64 m.), and (71 m.) Renigunta (Route 26, p. 542).

Vellore Town, the headquarters of the N. Arcot District (pop. 50,210), is 5 m. S. of Katpadi Stn., on the opposite bank of the Palar River, which is spanned by a fine brick bridge.

The **Fort** of Vellore was occupied by Narsingh Raja of Vijayanagar about 1500 A.D., and was the capital of Murtaza Ali of the Arcot family (p. 611). It is one of the most perfect specimens of military architecture to be seen in S. India.¹ The design is thought

by some to suggest the work of Italian engineers; but local tradition ascribes the building of it to Bommi Reddi, who came here in the 13th century from the Kurnool district. It consists of a main rampart broken at irregular intervals by round towers and rectangular projections, and is surrounded by a moat. The old entrance was by a winding roadway with massive gates across a drawbridge. On the S. is a sally-port approached by a footpath which crosses the ditch by a stone causeway. Within the fort is a parade-ground fringed by buildings. Noticeable among these are the great mahals or double-storied lines of rooms built round large courtyards. These are in use as a Training School for the Madras Police. The officers' bungalows are occupied by district officials.

The Temple, which is likewise in the Fort, is worth a visit. It contains no image and may be entered freely by Europeans. The massive gateway is surmounted by a fine seven-storied *sopuram* of blue granite, 100 ft. high, and flanked by two dwarf-pals. The door is very handsome, of wood studded with bosses of iron like lotus flowers. The entrance under the gopuram is lined with pilasters ornamented with circular medallions containing groups of figures. On the left of the gopuram inside is a stone pavilion, called the *Kaliana-manapam* (the marriage of the gods), exquisitely carved. On either side of the steps ascending to the mandapam are pillars, which are monoliths, carved to represent various animals and monsters, one above another, in a way which shows prodigious labour and great skill. In the portico or antechamber is a wonderfully-carved ceiling, with a centre-piece representing a fruit, round which parrots are clustered in a circle, hanging by their claws with their heads down towards the fruit; the several richly-carved pillars

¹ There is an excellent illustration of the Vellore Fort in Mr J. C. Molony's *Book of South India* (Methuen, 1926), p. 186.

of the interior are all different from each other. Fergusson says,¹ "The great cornice with its double flexures and its little trellis-work of supports is not only very elegant in form, but one of those marvels of patient industry such as are to be found hardly anywhere else. . . . The traditions of the place assign the erection of the Vellore porch to the year 1350, and, though this is perhaps being too precise, it is not far from the truth." A corridor runs round the enclosure, supported by ninety-one pillars, all with carvings on them. There is a plain mandapam at each corner of the enclosure, corresponding to the Kalyan mandapam. The inner temple is a dark, low building opposite the gopuram; it is entered from the N. side.

The Sepoy **Mutiny** at Vellore in 1806 was due partly to certain injudicious orders of Sir John Cradock (afterwards Lord Howden), the Commander-in-Chief in Madras, which prohibited the wearing of beards and caste-marks by the sepoys, and partly to the intrigues of the members of the family of Tipu Sultan, then confined in the fort. The garrison consisted of 380 British soldiers of the 69th Regiment² and 1500 sepoys. On the morning of 10th July the sepoys, led by the Indian officers, shot down the British officers as they issued from their residences, and penned the men of the 69th in their barracks, where 82 were killed and 91 wounded. Escaping from the barracks, the European soldiers made their way to the rampart, and there, under the command of two young surgeons, Jones and Dean, held their own. Meanwhile an officer who lived outside the Fort had ridden post-haste to Ranipet Cantonment, 14 m. away. Colonel Rollo Gillespie turned out

at once with a squadron of his own regiment, H.M. 19th Dragoons and a troop of the 7th Madras Cavalry, ordering the galloper guns to follow. On arriving at the Fort, Gillespie swarmed up the ramparts by a rope and took command of the defenders. An hour later the guns came up, and blew open the gates. The cavalry dashed in, and the mutineers were killed almost to a man.¹ The numbers of the two regiments which mutinied (the 1st battalion of the 1st Madras Infantry and 2nd battalion of the 23rd Madras Infantry) were removed from the Army list.

In the old cemetery to the right of the entrance to the fort is a walled-in enclosure with a low sarcophagus inscribed to the memory of Lieutenants Popham and Eley and 80 soldiers of the 69th Regiment, who fell during the mutiny. The graves are not discoverable of Col. Fancourt of the 69th, who was shot outside his house (now the residence of the Treasury Deputy Collector), or of Col. M'Kerras of the 23rd M.I., who was killed on the parade-ground.

$\frac{1}{4}$ m. to the W. of the fort are the *Tombs of Tipu Sultan's Family* in a well-kept enclosure. Right of the entrance is the tomb of Padshah Begam, wife of Tipu Sultan, who died in 1834 A.D. The second tomb on the right is that of Aftab Khan, who was second instructor to the ladies. Then comes a handsome tank, with stone embankment and steps. Next are two plain tombs of female attendants, and then a handsome granite pavilion with a massive roof supported by four pillars; inside is a black marble tomb to Mirza Raza, who married one of Tipu Sultan's daughters. At the

¹ Sir Henry Newbolt's poem should be read—

"They've kept the tale a hundred years,
They'll keep the tale a hundred more;
Riding at dawn, riding at dawn,
Gillespie came to false Vellore."

¹ *Ind. Arch.*, 1, 396.

² Now the 2nd Batt. Welsh Regt.

end of these is the largest building of all—a domed mausoleum, 20 ft. sq., to the memory of Bakhshi Begam, the widow of Hyder 'Ali, who died in 1806 A.D. Left of this is a mosque without any inscription, and beyond it scores of plain gravestones and other tombs of members of Tipu Sultan's family and retinue.

The family of Tipu Sultan were removed to Calcutta after the Mutiny, and have resided there ever since. Wazir Ali, the deposed Nawab Wazir of Oudh, who caused Mr Cherry, the Resident, to be murdered at Benares in 1799 (p. 90), was confined here for some years, and eventually died in Fort William at Calcutta in 1817, after eighteen years' captivity.

154 m. from Bangalore is **Walah Road** junction for Ranipet (4 m.) and Arcot (5 m.). The Palar River flows between these two, and is crossed by a stone causeway. **Ranipet** was for many years a large cavalry Cantonment. It was built in 1771 by the Nawab of Arcot in honour of a Rani of Gingee (p. 655), who performed *sati* on her husband's grave. There are many English tombs in the cemetery.

Near **Arcot** (**Arkát**) a small pagoda is reached and portions of the town wall, which was a massive structure of red brick. It was blown up with gunpowder, but the foundations remain, and huge fragments are seen, solid as rocks. $\frac{1}{4}$ m. farther S.E., along the bank of the Palar, is the **Delhi Gate**, which is the only one that remains so far uninjured that it is possible to form an idea of what the fortification was. Above the gate is *Clive's Room*. A road from here leads S. into the heart of the old town, and in $\frac{1}{4}$ m. to the **Taluk Cutcherry**—a pretty building erected in 1874. After passing this building and turning E., the broad moat, which surrounded the citadel and is now dry with trees

growing in it, is passed. Here are two small tanks, which once had fountains in the centre, and near this is the *Makbara*, or *Tomb of Sa'adatullah Khan*. In the same enclosure is the *Jami Masjid*. The tomb has a stone inserted over the door with an inscription, which says that the Nawab died in 1733 A.D.

W. of the *Jami Masjid* is the ruined *Palace of the Nawabs of the Carnatic*, on a mound overlooking the large lake called the Nawab's Tank. The walls of the darbar-room are still standing. Opposite is the *Kala Masjid*, or Black Mosque, and near the Palace is the tomb of a Muhammadan ascetic, with a rather handsome dome. To the W. is the mosque of Fakir Muhammad. Near it is a tomb, apparently unfinished, in which was laid the body of the Nizam Nasir Jang, murdered by the Nawab of Cuddapah on 5th December 1750, till its removal to Rauza (p. 75). Just across the road is the tomb of Tipu Auliya, of brick whitewashed. In the W. wall is a stone with an inscription, which says that Sa'adatullah Khan erected this tomb for Tipu, who was a man of God. It was from this saint that Tipu Sultan received his name.

History.

When Zulfakar Khan, Aurangzeb's General, took the Mahratta frontier fortress of Gingee in 1698 A.D., he made Daud Khan Governor of Arcot, under which District Gingee was included, and this officer colonised the place with Muhammadans. Until 1712 the Muhammadan Governors resided at Gingee, when Sa'adatullah Khan, who first took the title of *Nawab of the Carnatic*,¹ made Arcot his

¹ The Carnatic extended from the Kistna River to the Coleroon, and was bounded on the W. by the present British districts of Cuddapah, Salem and Dindigal, which formed part of the State of Mysore.

capital. Arcot, however, is chiefly known for the glorious capture and defence of it by Captain Clive, who here laid the foundation of his fame. About the year 1740 Chanda Sahib, the minister of Ali Dost Khan, nephew and successor of Sa'adatullah, obtained possession of the Hindu kingdom of Trichinopoly. The Mahrattas thereupon invaded the Carnatic. Ali Dost was killed, in battle and his son Safdar Ali was murdered by his brother-in-law Murtaza Ali. Two years later (1742) Safdar Ali's son was murdered at Arcot and the dynasty came to an end. Muhammad Anwar-ud-din, who was appointed Nawab of the Carnatic by the Nizam in 1744, was defeated and killed by Chanda Sahib at the battle of Ambur in 1749. The Council at Madras set up his son Muhammad Ali as Nawab; and Chanda Sahib, who was the French nominee, besieged him in Trichinopoly. Clive thereupon led an expedition against Arcot in 1751 in order to divert a part of the enemy from the siege.¹ Clive had with him only 200 British, with eight officers, six of whom had never before been in action, together with 300 sepoy and three field-pieces. With this small force he left Madras on the 26th of August, and arrived at Conjeeveram on the 29th. Here he learned that the garrison of Arcot amounted to 1100 men. On the 31st he arrived within 10 m. of Arcot, and marched on through a tremendous storm of thunder, lightning, and rain. The enemy's spies reported the coolness with which the English advanced in these circumstances, and this made such an impression on the garrison that they abandoned the fort. On the 4th of September Clive marched out against the garrison, which had taken up a position at

Timeri, a fort 6 m. S. of Arcot. The enemy retreated to the hills, and the English returned to the fort, but marched out again a second time on the 6th, and drove the enemy from a tank near Timeri. After ten days the enemy, who by reinforcements had grown to 3000 men, encamped within 3 m. of Arcot, where they were attacked at 2 A.M. on the 14th of September by Clive, and utterly routed. Two 18-pounders despatched from Madras had now nearly reached Clive, who sent out all the men he had, except 30 Europeans and 50 sepoy, to bring them in. During this emergency the enemy attacked the fort, but were signally repulsed. Chanda Sahib now sent 4000 men from Trichinopoly under his son Raja Sahib, who entered the town of Arcot on the 23rd of September. On the 24th Clive sallied from the citadel and fought a desperate battle with Raja Sahib's force. On the 25th Murtaza 'Ali brought 2000 men more from Vellore to join Raja Sahib. Clive's situation now appeared desperate: "The fort was more than 1 m. in circumference" (*Orme*, book 3, p. 198); "the walls were in many places ruinous; the rampart too narrow to admit the firing of artillery; the parapet low and slightly built; several of the towers were decayed, and none of them capable of receiving more than one piece of cannon; the ditch was in most places fordable, in others dry, and in some choked up; there was between the foot of the walls and the ditch a space about 10 ft. broad, intended for a faussebraye, but this had no parapet at the scarp of the ditch. The fort had two gates, one to the N.W., the other to the E., both of which were large piles of masonry projecting 40 ft. beyond the walls, and the passage from these gates was, instead of a drawbridge, a large causeway crossing the ditch. The

¹ "Mr Clive, a volunteer, had the command given to him to attack a place named Arcourt."—*Contemporary News Letter* (1751).

garrison had from their arrival employed themselves indefatigably to remove and repair as many of these inconveniences and defects as the smallness of their numbers could attend to. They had endeavoured to burn down several of the nearest houses, but without success; for these, having no woodwork in their construction excepting the beams which supported the ceiling, resisted the flames. Of these houses the enemy's infantry took possession, and began to fire upon the ramparts, and wounded several of the garrison before night, when they retired. At midnight Ensign Glass was sent with ten men and some barrels of gunpowder to blow up two of the houses which most annoyed the fort. This party were let down by ropes over the walls, and, entering the houses without being discovered, made the explosion, but with so little skill that it did not produce the intended effect; at their return the rope by which Ensign Glass was getting into the fort broke, and he was by the fall rendered incapable of further duty; so that, at the beginning of the siege, the garrison was deprived of the services of four of the eight officers who set out on the expedition, and the troops fit for duty were diminished to 120 Europeans and 200 sepoys. These were besieged by 150 Europeans, 2000 sepoys, 3000 cavalry, and 500 peons." Lord Macaulay writes of what followed: "During fifty days the siege went on. During fifty days the young captain maintained the defence with a firmness, vigilance, and ability which would have done honour to the oldest marshal in Europe. The breach, however, increased day by day. The garrison began to feel the pressure of hunger. Under such circumstances any troops, so scantily provided with officers, might have been expected to show signs of insubordination; and the danger

was peculiarly great in a force composed of men differing widely from each other in extraction, colour, language, manners, and religion. But the devotion of the little band to its chief surpassed anything that is related of the Tenth Legion of Cæsar or the Old Guard of Napoleon. The sepoys came to Clive, not to complain of their scanty fare, but to propose that all the grain should be given to the Europeans, who required more nourishment than the natives of Asia. The thin gruel, they said, which was strained away from the rice, would suffice for themselves. History contains no more touching instance of military fidelity, or of the influence of a commanding mind."¹

It was now that the gallantry of Clive's defence so impressed the Mahratta leader, Murari Rao, who was at the head of 6000 men, that he declared that he had till then never believed that Englishmen could fight, but, seeing their spirit, was determined to help them, and he put his troops in motion. This alarmed Raja Sahib, and he determined to storm Arcot before succour could arrive. He chose the great day of the Muharram, and Clive, who was exhausted with fatigue, was roused by the shouts of the enemy rushing to the attack, and was instantly at his post. The struggle lasted about an hour; 400 of the assailants were killed, while the garrison lost 4 Europeans killed and 2 sepoys wounded. At 2 A.M. next morning the enemy aban-

¹ It has been said that there is no foundation for this incident, as the garrison had ample supplies to the end of May. But the story is told as early as 1816 by Sir John Malcolm in his *Short Account of the Rise and Progress of the Native Army*, and repeated in his *Life of Clive*. Malcolm says distinctly that he received "this remarkable anecdote from an authority I cannot doubt, as it refers to the most unexceptionable contemporary witness." Clive himself and his son Edward, the first Earl of Powis, who was Governor of Fort St George from 1798 to 1803, are obviously intended.

doned their camp, into which the garrison marched and brought off four guns, four mortars, and a large quantity of ammunition. Thus ended on the 15th November this famous siege, and Clive, being reinforced by Captain Kilpatrick, marched out on the 19th and took the Fort of Timeri. A few days later, he defeated a force of 300 French, 2000 horse, and 2500 sepoys, with four guns, and took Arni, with Raja Sahib's treasure and baggage.

In 1753 Lally seized the Fort of Arcot by bribing the Indian commandant; but in 1760 it was recaptured from the French by Colonel Coote. In 1780 Hyder 'Ali, after his victory at Pollilore over Colonel Baillie, made himself master of Arcot, and strengthened the fortifications, but Tipu Sultan abandoned it in 1783. Muhammad

Ali, who had received the title of Walajah from the Emperor at Delhi, had already removed in 1767 from Arcot to Chepak in Madras, and died there in 1795. In 1801, on the death of his son, Umdat-ul-Umara, the Carnatic was annexed by the E. India Company, and the districts of N. and S. Arcot, Nellore, Trichinopoly and Tinnevely, were thus acquired.

The line from Arcot to Madras was the first railway in the Presidency, and was opened in 1856.

177 m. from Bangalore is **Arkonam junction** (R.), 43 m. from Madras (p. 542). A branch line of the S. Indian Ry. runs S. to Conjeeveram and Chingleput, whence Madras can be reached by the S.I.R. main line (Route 34).

219 m. from Bangalore, **Madras Central Station** (Route 33).

ROUTE 33.—MADRAS CITY AND ENVIRONS.

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MADRAS. ★ — Capital of the Presidency of Fort Saint George. Lat. $13^{\circ} 4'$, long. $80^{\circ} 14' 54''$ E. Population (1921), 526,911, of whom 427,722 are Hindus, 53,163 Muhammadans, and 44,136 Christians. Distances by rail; 794 m. from Bombay *viâ* Wadi and Raichur (Route 26); 1032 m. from Calcutta *viâ* Bezwada (Route 25); 1318 m. from Delhi by the new route *viâ* Bezwada, Kazipet-Balharshah (p. 570), Nagpur and Itarsi (Route 9); 737 m. to Colombo *viâ* Dhanushkodi and Talaimannar (Route 36); 357 m. to Ootacamund (Route 35).

History.

Madras¹ was the site of the earliest important settlement of the original East India Company, to which Queen Elizabeth granted a charter, and was founded from the station of Armagaum (which lay N. of Pulicat, itself 25 m. N. of Madras), in 1639 by Francis Day, on territory given by the deputy of the Raja of Chandragiri, the last representative of the Vijayanagar Royal family, and confirmed by the Raja six years

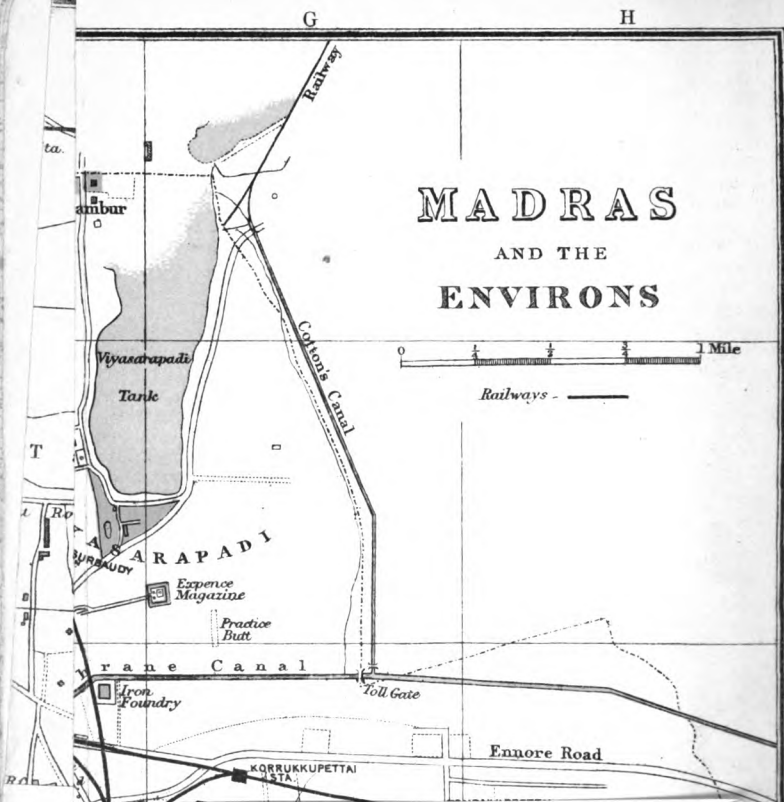
later by a grant inscribed on a plate of gold. Little could the Muhammadan Kings who drove out the dynasty of Vijayanagar in 1565 have supposed that within sixty-five years a scion of the exiled family would grant territory to another conquering race destined to acquire supremacy over all India. A small Fort was at once erected in the settlement, which was known as Chennapatnam, and a town named the Black Town, now George Town, arose N. of it. In 1683 the settlement was made independent of that of Bantam (founded in 1602), and Mr Aaron Baker was appointed its first President, and by 1667 the population had grown to nearly 30,000. The Madras Municipal Corporation is the oldest Corporation in India. It was constituted on 29th September 1688 under a charter issued under the orders of His Majesty James II. under the East India Company's seal on 30th December 1687. The charter constituted the "Town of Fort St George, and all the Territories thereunto belonging, not exceeding the distance of 10 m. from Fort St George to be a Corporation by the name and title of the Mayor, Aldermen, and Burgesses of the Town of Fort St George and City of Madrassapatam." The constitution underwent alteration from time to time, and the last alteration was made by the Madras City Municipal Act, 1919. The principal Governors in the 17th and 18th centuries were Sir W.

¹ Selected List of Books on Madras:—*Memories of Madras*, by Sir C. Lawson (Sonnenschein, 1905); *Vicissitudes of Fort St George*, by D. Leighton (Cambridge, Madras, 1902); *Vestiges of Old Madras*, by Lt.-Col. H. D. Love (Murray, 1913); *Fort George, Madras*, by Mrs Penny (Sonnenschein, 1900); *Madras in the Olden Time*, by J. T. Wheeler (Higginbotham, Madras, 1862). There is a good chapter on modern Madras in *A Book of South India*, by J. C. Molony (Methuen 1926).



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usually granted when the Governor is not in residence) contains a most interesting collection of pictures. In the lower hall is a picture of the installation of



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Langhorne (1670-78), Elihu Yale (1687-91), Thomas Pitt (1730-1735), the grandfather of Lord Chatham, and Pigot, subsequently Lord Pigot (1755-63 and 1775), who was deposed by his Council and died in durance; and in the 19th century, Lord Clive, Lord William Bentinck, and Sir Thomas Munro. Warren Hastings was a member of the Madras Council from 1769 to 1772. Its subsequent history till the end of the 19th century has for the most part been part of that of the Fort (p. 535) and the Presidency. The Chamber of Commerce was constituted in 1836. The Municipal Corporation since 1919 consists of 50 councillors (41 elected, 9 appointed by the Governor), under a President who is annually elected. The income of the Municipal Corporation was nearly 52 lakhs in 1927-28. A dozen mills employ 19,000 hands. The Buckingham and Carnatic Mills, the principal undertaking, are built on the Oteri Nullah in Perambur to the N.W. of the city. The city was one of the first in India to introduce electric tramways.

Arrival at Madras.—The mail trains from Calcutta (Route 25), Bombay (Route 26), and Bangalore (Route 32 (b)) complete their journey at the **Central Station**, which is the terminus of the Madras and S. Mahratta Railway. The **Egmore Station** (South Indian Railway) is the starting-point of the mail trains to Mettupalaiyam (for Ootacamund) and Mangalore (Route 35), and also to Colombo *via* Dhanushkodi, and the South of India generally (Route 36). Those visitors who prefer the sea route from Calcutta or Colombo, will be rewarded by a magnificent view of the city, as they approach, especially from the S. The first object to attract the eye, in the latter case, is the spire of the Roman Catholic Cathedral at San Thomé, which was Portuguese territory

until 1749. A series of splendid buildings fringes the Marina, a broad road along the sea-front, some 2 m. in length, which runs from San Thomé to the Napier Bridge over the river Cooum. Next comes the historic pile of Fort St George, and beyond is the High Court, with its Lighthouse, and the Harbour, where the steamer is berthed alongside the Pier.

The centre of Madras, for all the purposes of a visitor, is **Mount Road**, on or near which the principal hotels and shops are situated. Half-way between Government House, situated on the Cooum River, at the N.E. end of the road, and St George's Cathedral and the Horticultural Gardens lying at the S.W. end, is the Madras Club, and in front of it a statue of Brigadier-General Neill, C.B., Aide-de-Camp to the Queen, who "fell gloriously at the relief of Lucknow, 25th September 1857, aged 47" (p. 455). Opposite Government House is a statue of King Edward VII, by Mr G. E. Wade, presented to the city by Lod Krishnadas Balmukandas, and unveiled in 1903. Close by is a statue of Lord Ripon (Viceroy 1880-84).

Between Government House and the fort is the *Island* embraced by two branches of the Cooum, and forming a large parade and recreation ground. The Gymkhana Club is a handsome structure in the S.W. corner. On the road to the Fort stands a bronze equestrian *Statue of Sir T. Munro*, by Chantrey, erected by public subscription in 1839 at a cost of £9000. The S. branch of the river is spanned by the Willingdon Bridge, the N. branch by Walajah Bridge.

Government House (admission usually granted when the Governor is not in residence) contains a most interesting collection of pictures. In the lower hall is a picture of the installation of

Nawab Ghulam Muhammad Ghaus Khan, under the Governorship of Lord Elphinstone, with the date 1842. In the drawing-room is a full-length portrait of Lady Munro, by Sir Thomas Lawrence—one of his finest pictures. There are also a remarkable portrait group, attributed to Chinnery, of Major Stringer Lawrence and Walajah, the famous Nawab of the Carnatic, and portraits of the Marchioness of Tweeddale, by Sir Francis Grant; Lord Clive, by Thomas Day, after Dance; Sir Arthur Wellesley, by Hoppner; General Medows, by Home; and Lord Hobart (who died at Madras, when Governor, in 1875), by Watts. The *Banqueting Hall*, in a detached building, is a noble room 80 ft. long and 60 ft. broad, and very lofty. The principal entrance is on the N., and is approached by a broad and lofty flight of stone steps. The hall was constructed in 1802 during (the second) Lord Clive's government to commemorate the fall of Seringapatam. Round the walls are large pictures of the Queen-Empress Victoria; George III., taken at the beginning of his reign; a full-length of Sir Thomas Munro, by Shee; Robert, Lord Hobart, 1794-8; the third Lord Harris (1854-59), by Grant; Lord Mornington, afterwards Marquis Wellesley, by Thomas Hickey, seated on the terrace of the old Government House in the Fort, with two flags on his left, the British surmounting that of Tipu, and the steeple of St Mary's Church; Sir C. Trevelyan; General Sir Eyre Coote, by Hickey, after Zoffany and Home; Lord Cornwallis, by Home; Lord W. Bentinck (Governor 1803-7), by H. W. Pickersgill; Lord Napier and Ettrick, K.T., in the robes of a peer; the Marquis of Tweeddale, by Grant; Sir M. E. Grant Duff; Lord Connemara, and others, including a curious portrait by George Willison of Lord Pigot, which was originally in the Palace

at Tanjore (p. 666). The present Governor, Viscount Goschen of Hawkhurst, G.C.I.E., C.B.E., succeeded Lord Willingdon in 1924.

To the E. of Government House, on the sea-front, are the **Chepauk Park and Buildings**. Of this park, once the property of the Nawabs of the Carnatic, Burke gave a most vivid description in his report to the House of Commons upon the affairs of the East India Company. On the death of the last occupant of the *masnad*, in 1855, the property was bought by the Government for 5½ lakhs of rupees. The grounds were cleared of minor buildings, and many alterations were made. The entrance, by the Walajah Road, is through an ornamental gateway with representations in porcelain of the various incarnations of Vishnu, executed by the Madras School of Art. The palace was divided into the Kalsa Mahal, a two-storied building with a small dome, which is now part of the *Civil Engineering College*, and the Humayun Mahal and Diwan Khana, both one-storied buildings, which are occupied by the *Board of Revenue*, and which contained the Darbar Hall. The Mahakama, or Court of Justice, is the residence of the Principal of the Engineering College. Beyond these are the Public Works' Secretariat and the *Presidency College*, originally organised in 1855, a fine large building in the Italian style, with the Students' Hostel behind it. To the E., on the sea-shore, is the interesting **Marine Aquarium** originated by Lord Ampthill and arranged by Mr Edgar Thurston in 1908. It is the only one in India, and is the finest of its kind in the East. A visit is strongly recommended. On the W. is the Caste and Gosha Hospital (opened in 1886), hidden amongst trees, and beyond it are the fine ground and pavilion of the Madras Cricket Club. N. of the old Palace is the

Senate House, designed, like many other buildings in Madras, by Mr Chisholm. It was begun in 1874 and completed in 1879, at a cost of Rs.289,000. There are statues here of the late Mr V. Krishnaswami Iyer, a former member of the Madras Executive Council, and the late Mr G. K. Gokhale, the well-known Mahratta politician. Close to the S. entrance, facing Chepauk Palace, is the *Jubilee Statue of Queen Victoria*, a replica of the Boehm statue at Windsor, presented to the city by Raja Gajapati Rao of Vizagapatam, and unveiled on 20th June 1887. To the S. is Queen Mary's College for Women. S.W. of the Chepauk Palace and S. of Government House is *Triplicane*, a crowded district containing the Palace of the Prince of Arcot, the representative of the family of the Nawabs of the Carnatic.

The fashionable drive and promenade of the **Marina**, which Madras owes to the Right Hon. Sir M. E. Grant Duff, passes the statue of the Queen on the E. It extends from the Napier Bridge on the N. almost to the Roman Catholic Cathedral of San Thomé. From the S. end of the Marina, Cathedral Road runs nearly due W. about 2 m. to St George's Cathedral, the Marina Road itself turning inland and running to the favourite European suburb known as "the Adyar," from the river of that name, along which lie several large country-houses. The Adyar Club, which is one of the pleasantest club-houses in India, can be distinguished by the white cupola on the roof; a broad open terrace on the S. overlooks the Adyar River, on which excellent sailing and boating is to be had. The grounds are so extensive that there is room in them for a riding track, a golf-course, and several tennis courts. The name of the original owner of the estate, Robert Moubray, who came to

Madras in 1771, survives in the road which leads to the main entrance to the Club. A great part of the roads in this locality is overhung by mighty banyan-trees, forming a tunnel of agreeable coolness even when the sun is hot.

The Roman Catholic Cathedral at San Thomé, founded by the Portuguese in 1504, has the reputation of standing over the earthly remains of St Thomas. His tomb is pointed out in a subterraneous recess covered by an altar. On the E. side of the Cathedral is a pretty Anglican church situated on the top of a sand-dune within a few yards of the sea. This tract and that stretching to the W. of it was once known as Mylapore (p. 625). To the S. of it, and 1 m. below the Cathedral of San Thomé, the Adyar River finds its way into the sea. There is a picturesque temple in Mylapore.

After crossing the Cooum River by the Napier Bridge, the Marina merges in Beach Road, which runs past Fort St George.

Fort St George, situated on the sea-front N. of the island, contains the European barracks, the Arsenal, St Mary's Church, the Military hdqrs., and some Government Offices. The E. face of the Fort, which is straight, is now separated from the sea by the road and a sandy foreshore accumulated during the present century. In the centre is the old **Sea-Gate**. The W. face landward is in the form of a crescent, surrounded by a deep fosse, crossed by draw-bridges. There are two gates on this side, the Walajah and St George's Gates. On the N. are the Choultry Gate, now bricked up, and the North Gate. The San Thomé Gate is in the S. wall. The Fort defences are supported by three detached batteries, one at the Marina, and one at each end of the sea-front of George Town.

The original Fort was founded

in 1639, the year in which Francis Day obtained the concession of Chennapatnam. It was remodelled by Bartholomew Robins, once mathematical professor at Woolwich, and assumed its present shape after the siege by Lally. It had been unsuccessfully attacked by Daud Khan, General of Aurangzeb, in 1702, and by the Mahrattas in 1741; but in 1746 La Bourdonnais held the town to ransom for £400,000, and received in the name of the French King the surrendered keys, which were restored to the English by the Treaty of Aix-la-Chapelle. On 14th December 1758 the French again arrived before the Fort, under the command of Lally. The defence was conducted by Governor Pigot and Colonel Stringer Lawrence. The French made their approach on the N. side, and their principal battery, called Lally's, must have been near where the Christian College House now stands, as it was close to the beach, and about 580 yds. N. of the Fort. Another battery was at the Indian cemetery in George Town, and a third about 400 yds. to the S.W. On 16th February 1759 the French retreated upon the arrival of a British fleet of six men-of-war, leaving behind them fifty-two cannon and many of their wounded. The fleet arrived not a day too soon, as the enemy had pushed their trenches right up to the N.E. corner of the Fort, and 500 of the 1700 British soldiers had been killed, captured, or wounded. In April 1769, while the forces were far away, Hyder 'Ali made his appearance with his cavalry, and dictated to the Governor the terms on which he would spare the defenceless territory. Again, on 10th August 1780, and once more in January 1792, the garrison were alarmed by the appearance of the Mysore cavalry. Here Clive twice snapped a pistol at his own head. From this Fort he marched to his first victories; and from it went the

army which, on 4th May 1799, captured Seringapatam and brought about the downfall and death of Tipu Sultan.

If the Fort is entered from the E. by the Sea Gate, the Secretariat buildings will be seen in the centre, with St Mary's Church to the S. and Cornwallis Square to the W. of them. A fine Council Chamber, in which there is a bust of the late Mr E. S. Montagu, has been erected for the use of the Legislative Council behind the Secretariat. In the square there formerly stood, under a stone canopy, a statue of Lord Cornwallis, by Banks, which was erected in 1800 at the joint expense of the principal inhabitants of Madras. It has been removed to the reading-room of the Connemara Library (p. 623). The Church and the buildings to the S. of it are the oldest; the barracks, which are seen on the right when entering by St George's Gate, are modern.

St Mary's Church,¹ built 1678-1680, was the first English church in India; but was entirely rebuilt in 1759. Here in 1689 were baptized the three daughters of Job Charnock, the founder of Calcutta: Robert Clive was married here in 1777: and Lord Pigot, Sir Thomas Munro, Lord Hobart, and other distinguished persons are buried here. One piece of the Church plate was given in 1687 by Governor Yale, afterwards the great benefactor of Yale College, U.S.A. The most remarkable monument is one erected by the E.I. Company to the famous missionary Schwartz, at one time the intermediary between the British and Hyder 'Ali. He is represented dying on his bed surrounded by a group of friends, with an angel appearing above. In

¹ *Fort St George, Madras*, by Mrs F. Penny, and the *Vicissitudes of Fort St George*, by Mr D. Leighton, will be found to contain many interesting details regarding this church.

the Church are hung the old colours of the Madras Fusiliers, which were with the Regiment at Cawnpore and Lucknow.¹ This was the first European regiment of the E.I. Company, and Lord Clive, Sir John Malcolm, and Sir Barry Close served in it. On the N. side of the Church are a number of tombstones removed from the old cemetery near the site of the High Court.

On the W. side of Charles Street, leading to the gate of San Thomé (the S. gate of the Fort), are pointed out quarters which, according to tradition, were once occupied by Colonel Wellesley (the Duke of Wellington). The office of the Accountant-General, which is close to the Church, was formerly the Government House.

The **Arsenal** forms a long parallelogram. In the *Museum* on the first floor are four cornets, or flags, belonging to the 1st and 2nd Regiments of Madras Cavalry—old flags taken from the Dutch and French, sewn up in covers, to protect them from the squirrels; a very curious brass mortar from Kurnool, shaped like a tiger sitting with legs planted almost straight out; the colours taken at the capture of Sadras and Pulicat in 1781; the Dutch colours taken at Amboyna in 1810; tiger-headed guns taken at Seringapatam in 1792; the six keys of Pondicherry, taken in 1778; and a projectile, which, issuing from the cannon, opens out like a double-bladed sword.

N. of the Fort, and at the S.E. corner of the city, is the old **Lighthouse** on the Esplanade, which has been superseded by a tower on the High Court, furnished with the latest improved light apparatus. The Lighthouse tower is 160 ft. high, and the light is

visible 20 m. off at sea. The High Court, forming a handsome pile, was designed and erected in the Hindu-Saracenic style by Messrs J. Brassington and H. Irwin, C.I.E., and formally opened in 1892. The arrangement of the interior is good, and the internal decoration of wood-carving and painted glass is well worthy of inspection. In the central vestibule is a fine statue of Sir Muthuswami Iyer, a former Indian Judge. A tomb in the shape of a pyramid, which stands in the compound outside, is the solitary survivor of the many which stood here in the old cemetery of the Settlement. Lally made use of the monuments as cover for his attacks on the Fort in 1758, and they were removed after the siege was raised. There are two inscriptions on the tomb; one to the only son of Elihu Yale (28th January 1682) and the other to Joseph Hynmers, second in Council (28th May 1680), whose widow married Yale. Opposite the High Court is the fine Y.M.C.A. building of red sandstone, designed by Mr Harris, Government Architect, and presented by the Hon. W. Wanamaker, formerly Postmaster-General of the United States. W. of the High Court is the modern **Law College**, a fine structure in similar style, designed by Mr Irwin, C.I.E.; and N. of this, across the Esplanade, are the **Pachiappa College** and Hall, which owe their erection to Pachiappa Mudelliar, a wealthy and benevolent Hindu gentleman, who, dying a hundred years ago when education was almost unknown in Madras, endowed various religious and scholastic institutions and private charities with no less than a lakh of pagodas. Opposite the College is a statue of King George V. W. of these, and occupying a long frontage on the Esplanade, are the **Madras Christian College Buildings**, situated opposite the High Court and

¹ Gen. Neill (of Mutiny fame) wrote a most interesting history of the Regiment in 1842.

to the E. of the Y.M.C.A. buildings. They were erected at a cost of £50,000, and form one of the finest Colleges in India; it was originally founded in 1837. Opposite it is a statue of the Rev. Dr Miller, C.I.E., Principal of the College, erected by his pupils and admirers.

First Line Beach, the most important commercial thoroughfare, begins N. of the Esplanade from Parry's Corner. It represents the old line of the sea-wall, but the building of the Harbour has thrown up the strip of ground on which are the lines of the South Indian Railway and the houses of the Port officials. Here are the **Beach Station** of the S.I. Ry., the Post Office, the Imperial Bank, the **Port and Customs Offices**, and various houses of business. W. of it is Second Line Beach and the thickly-inhabited Indian quarter, formerly known as Black Town and renamed **George Town**, in honour of the visit of King George V in 1905. Armenian Street, running parallel to the sea-front, contains an old Armenian church and a Roman Catholic cathedral, dating from the beginning of the 18th century; farther to the W. of Armenian Street lies Popham's Broadway. N. of the city are the Monegar Choultry, a Poor-house for destitute Indians, and the Leper Asylum; and at the N.W. corner in Wall Tax Street are some remains of the old town walls. The name of this street commemorates a tax which was never levied. The Council of Fort St George decided that in order to defray the cost of a rampart, an assessment should be made on "every house and garden within the walls"; and a Collector of the Town Wall Tax was duly appointed. But legal opinion was received from Bengal that the E. India Company had no power to tax the inhabitants.¹ Other streets running N. and S. are

Godown Street, with the offices of wholesale dealers in piece goods; and Mint Street, at the N. end of which was the Mint in the present Government Press building. From E. to W. runs Old Jail Street, and at its junction with Mint Street are the seven wells from which the Fort drew its water-supply. New waterworks for the supply of filtered water to the city have been carried out with marked advantage to the health of the town. Works for underground drainage for the Northern part of the city have been executed, and drainage works throughout the remainder of the city.

The Harbour. The foundation-stone of the harbour works was laid by King Edward, then Prince of Wales, in 1875, but in October 1881 the works completed up to that time were much damaged by a cyclone. These violent storms have visited Madras from time to time. Such occurred in October 1746, in 1782, 1807, and 1811. On 2nd May 1872, in another great storm, the *Hotspur* and eight European vessels and twenty Indian vessels of altogether 4133 tons were lost. The last cyclone to break in Madras was on the 11th November 1918, when 6 inches of rain fell. The cyclone of November 1927 passed over the city and spent its fury on Nellore (p. 520).

Like the greater part of the East Coast of India, the coast at Madras consists of a sandy beach shelving out gradually to a depth of 10 fathoms at a distance of a couple of miles from the shore. The harbour, therefore, has had to be an entirely artificial one: "a challenge flaunted in the face of nature." It is 200 acres in area and is formed of breakwaters extending out from the shore 3000 ft. apart, closed at their seaward end by a similar work which extends, however, to a distance of 1500 ft. North of the

¹ Molony, *A Book of South India*, p. 21.

Northern of the two breakwaters, thus forming a shelter for the entrance, 400 ft. wide and 35 ft. deep at low water, which has been formed near the Eastern or seaward end of the N. breakwater. The Western or shoreward side of the enclosed 200 acres has been furnished with a deep-water quay, and the whole of the enclosed area has been dredged to a depth of 30 ft. A few years ago the entrance was in the Eastern side of the harbour and there were many weeks in every year when the water inside the enclosure was too rough for the convenient working of cargo. But nowadays there is smooth water inside the enclosure all the year round. There is a 9-acre inner or subsidiary harbour for the shelter of craft of 1000 tons and downwards, and advantage of this has been taken by merchants to introduce a fleet of 60 or 80 modern steel and wooden lighters of 40 tons to 100 tons each, as well as a number of steam tugs. This inner basin is quayed and craned all round for lighter work, as is also a further 2-acre pond for the timber trade of the port. Besides the quay along the West side of the harbour, which accommodates four to six of the ordinary Suez Canal class of vessels, there are three other quays at which vessels can lie. The P. & O., City, B.I., and other liners call at the port regularly, embarking and landing passengers direct at the quays, where trains come direct to ship's side. Shore accommodation has been provided, facing the South Quay; and customs examination and the medical inspection of emigrants take place here. Horses also, of which a considerable number are imported at Madras from Australia, walk straight off shipboard into paddocks. Bulk oil, petrol, and kerosene are pumped ashore at three places, direct from the oil-steamers, into million-gallon tanks, while steamers can bunker fuel oil on the

West Quay. The quays are well equipped with cranes. For the transit of goods through the port, between ship and rail or cart, a range of about 6 acres of fine shedding is available, besides about 5 acres of warehouse floor space for exports, all of the best and latest design for such structures. The general business of the port is conducted in a fine range of modern offices standing in the centre of the West quay. The trains of both railway administrations, one 5 ft. 6 in. gauge and the other of the metre-gauge, converging on Madras, with a reticulation of some 4000 m., enter the harbour premises, where they are handled by the Port Trust over their own mixed gauge lines. The total value of the trade of the port in 1927-28 was 4772 lakhs of rupees, which represented 46 per cent. of the aggregate trade of the Presidency; of this amount the Port Trust levies about 128th part. The entire expenditure on the artificial harbour amounted to about 2½ millions sterling, of which a little over half was borrowed money, to be paid off completely in 1952. Loans outstanding amounted to Rs.13,509,354 at the close of the year 1927-28.

Exports and imports amounted during the same period to 1,444,342 tons, or an increase of 27 per cent. over the previous year. The principal exports are hides and skins, chrome, ore and magnesite, ground nuts and other oil seeds, raw cotton, manures and onions. The principal imports are coal, oils, food grains, sugar, timber, machinery, and piece goods. In 1927-28 the number of steamers calling at the port was 936 of 3,013,109 tons; and the Port Trust had an income of 45 crores. 98,728 passengers arrived at the Port, and 133,628 left it. The port lies more or less in the track of cyclones, which affect it to a more or less trifling extent every two or three years, but severely at

intervals of twenty or thirty years. Provided, however, their own gear is strong enough to hold them—the Port Trust's own moorings have never failed—modern steamers pay scant attention to these cyclones; though, needless to say, to protect the sides of such vessels from *wind* is a task, on the flat course of Madras, beyond the power of any Port Authority, which at Madras has done all that is possible by securing them from *waves*. The rise and fall of tide is only about 4 ft. The old iron screw pier, so long a feature of the port, has long since been removed.

W. of the Fort, and between it and the People's Park, is a fine group of buildings, consisting of the Memorial Hall, the Medical College, the General Hospital, the offices of the Madras and S.M. Ry., and the Central Railway Station, while a little farther on, across the Cochrane Canal, are the Jail, the Moore Market, the Victoria Public Hall and the new Municipal Offices at the entrance to the Park.

The **Memorial Hall** is a massive building of no great architectural beauty, erected by public subscription in commemoration of "the goodness and forbearance of Almighty God in sparing this Presidency from the Sepoy Mutiny which devastated the sister Presidency of Bengal in the year 1857." It is available for public meetings of a religious, educational, charitable, and scientific character. The Bible Society occupies the basement, and the Tract and Book Society an adjacent building somewhat in the same style of architecture.

The **General Hospital**, opposite the Central Railway Station, is one of the largest in India. The records go back to 1829. Dr Mortimer published an account of it in 1838. The hospital contains 500 beds, and is for both Europeans and Indians. A new out-patients' department is

under construction, and some of the older buildings are being replaced by modern blocks. The Medical College is accommodated in a large detached building to the E. side. The **Central Railway Station** of the Madras and Southern Mahratta Ry. is one of the finest in India; the clock tower is 136 ft. high. Opposite it and adjoining the Jail is the Choultry or R.H. of Sir Ramaswami Mudeliar. The Moore Market, at the entrance to the People's Park, well merits a visit in the morning; to the E. is the Evening Bazar building. Alongside of the Market is the **Victoria Public Hall**, designed by Mr Chisholm, in keeping with the style of the station; it was erected during 1883-8. The principal hall takes in Madras the place of a theatre as well as of an "assembly room." To the W. of the Victoria Public Hall, in the *People's Park*, a modern office building, called the "Ripon Building," after the Viceroy, Lord Ripon, the founder of local self-government in India, is occupied by the Corporation of Madras. It was designed by Mr Harris, Consulting Architect to the Government. It is a graceful building, with a clock tower higher than that of the Central Railway Station. In the centre of the Eastern portion of the park, and to the N. of the Moore Market, the S. Indian Athletic Association occupy a large piece of land where athletic sports and annual fairs are held. The Association have erected a building called the Moore Pavilion at the Northern end of their grounds. To the N. of this is a Swimming Bath. The *People's Park* originated with Sir Charles Trevelyan while Governor of Madras, and was opened in 1859. It embraces 116 acres of land. It has eleven artificial lakes, an athletic ground, a fine zoological collection, tennis-courts, a police station and a bandstand.

The Poonamallee Road skirts the S. of the quarter of Vepery and leading to the quarter of Egmore, passes the School of Arts and St Andrew's Church. Vepery is largely occupied by Anglo-Indians, whose Association, founded in 1879, is the leading society of its class in India. The Church of *St Matthias* was given by Admiral Boscawen in place of one destroyed during the war between the French and English. W. of the church is the Doveton Protestant College, founded in 1855.

In the Egmore quarter are the main **Station of the South Indian Railway**, the Maternity and Ophthalmic Hospitals, and the Museum.

The **School of Arts** was established as a private institution by Dr Alexander Hunter in 1850. Besides drawing, painting, engraving, and modelling, the crafts of cabinet-making and carpet-weaving, pottery and lacquer, metal and jewellers' work, are taught to the 450 scholars.

St Andrew's Church was built in 1818-20 at a cost of £20,000, the Architect being Major de Havilland. The Madras stucco, or *chunam*, in the interior gives to the pillars all the whiteness and polish of the finest marble. The steeple rises to the height of 166 ft., and, after the lighthouse tower of the High Court, is the principal landmark in Madras; the building is remarkable for the complete substitution of masonry for timber, which might be destroyed by white ants.

From St Andrew's Church, Pantheon Road leads S.W. to the **Museum**, which forms the centre of a fine group of buildings, including the Victoria Technical Institute, the Connemara Library, and the New Theatre. To these has been added the **Empress Victoria Memorial Hall**, a graceful

building, of which King George, then Prince of Wales, laid the foundation-stone in 1906, and which was opened in 1909. The collection was formed in 1846, and owes its present development to Dr Balfour. In the various Departments of Natural History, Botany, Geology, and Industrial Arts are many objects of great interest. The Department of Antiquities and Archaeology contains some very beautiful remains of the Buddhist tope at Amaravati (p. 519), excavated by Mr R. Sewell, M.C.S. The sculptures originally discovered at this site are now exhibited on the great staircase of the British Museum. Other objects of interest formerly in the Arsenal and now in the Museum are—iron helmets captured at Manilla; a gun captured from Holkar in 1803; a victim-post surmounted by an elephant's head, at which human sacrifices were made; the cage in which Captain Philip Anstruther was confined in China;¹ and some leathern petards. The **Library** has a fine reading-room, in which works relating to Madras and S. India can be consulted; the books of the Madras Branch of the Royal Asiatic Society have also been kept here of late. A number of archaeological remains are arranged in the pretty grounds in front of the Museum. The statue of Lord Cornwallis, which once stood in the Fort Square (p. 618), has been placed in the reading-room. On the pedestal is sculptured the surrender of Tipu Sultan's sons in 1792.

From near the Museum the Commander-in-Chief's Road leads to the bridge so named, and so to Mount Road, opposite the Club; and the road crossing the Cooum River by Anderson's Bridge leads

¹ Capt. Anstruther of the Madras Artillery (1837-1884) was captured by a Chinese mob in September 1840, and carried about the country in this cage until the following January. He was over 6 ft. high. A lady, Mrs Noble, was kept in a similar cage.

to the old **Observatory** past the **Old College**, corresponding, to the Writers' Buildings in Calcutta (p. 124) and Doveton House, once the residence of General Sir John Doveton of the Madras Cavalry, who died there in 1847, and now a Government Training College for Girls. The Observatory originated in a small private station started in 1787 by Mr W. Petrie, a scientific member of Council. The present building was erected in 1793 by Michael Topping, under orders from the Directors of the East India Company. It stands in N. lat. $13^{\circ} 4' 8''$, long. 5 hr. 20 m. 59.6 s. E, and formerly gave the railway time for all India. It is now used as a meteorological station only, the actual Observatory having been moved to Kodai-kanal (p. 672).

From the Observatory a thoroughfare runs S. to the **Horticultural Gardens** and **St George's Cathedral**, towards the S.W. end of Mount Road. The gardens, which occupy an area of 22 acres, are laid out in a highly ornamental manner. Many rare trees, shrubs, and plants are to be seen there, one of the great attractions being the splendid *Victoria Regia*, in a couple of small ponds. The Society possesses a valuable Library, containing many rare works. The gardens were brought into existence mainly through the efforts of Dr Wright about the year 1836.

The **Cathedral** of St George stands in an enclosure on the E. side of the gardens. The exterior is not handsome, but the dazzling white *chunam*, the decorated roof, the very numerous and remarkably handsome tablets and tombs, and the lofty and massive pillars in the interior, produce a very pleasing impression. At the E. end of the N. aisle is a fine monument to the Right Rev. Daniel Corrie, LL.D., first Bishop of Madras in 1835. The monument to Reginald Heber,

the second Bishop of Calcutta (d. 1826), is on the N. wall of the N. aisle, and represents him confirming two Indians. There is also a monument to Major George Broadfoot, C.B., who was one of the illustrious garrison of Jalalabad, and was killed at the Battle of Firozshahr (Ferozeshah) (see p. 354). The Church was consecrated in 1816, and became the Cathedral Church when the Diocese of Madras was constituted in 1835.

From the Cathedral the road to Guindy and the Southern suburbs runs along the side of the great Long Tank, which should be viewed from the top of the embankment, for nearly 3 m. to the **Marmalong Bridge** (said to be *Mamillanna*, "Our Lady of the Mangoes"), spanning the Adyar River. It has twenty-nine arches. Near the N. end is an inscription in English, Latin, and Persian, which says that the expenses of the bridge were defrayed from a legacy left for the purpose by Adrian Fourbeck, a merchant of Madras. To the right and left of the road before crossing the river will be observed the *Teachers' College* and the *Government Veterinary Hospital*. At Saidapet (5 m. from Egmore station on the S.I.R. line to the South) are the headquarters of the Chingleput District.

The **Little Mount** is a curious spot on a rocky eminence on the left of the road, on the right bank of the Adyar River, after crossing Marmalong Bridge. This place is famous in connection with the tradition of the martyrdom of the Apostle St Thomas. It was formerly called Antenodur, but the Portuguese named it Little Mount to distinguish it from St Thomas's Mount, which they called Big Mount. The Apostle St Thomas, so runs the tradition, used to live here periodically and pray on the top of the hill (Little Mount) according

to the Jewish custom. When praying in the cave he was, it is said, mortally wounded by a lance. In that state he ran to St Thomas's Mount, where he was killed. His body was carried by his converts to San Thomé, where it was buried, and his tomb is in the Cathedral of San Thomé.

A flight of steps leads to the Church. On the left of the entrance is a portrait of St Thomas with an old Portuguese inscription. The Church was built by one Antonio Gonsalves De Taide, 1612 (who appears to have been a Goanese), and was endowed with 32 acres by the Nawab of Arcot. It is dedicated to Our Lady of Health, and has a congregation of 200. Descending some steps on the left from the Church, a slope leads down to a *cavern* hewn out of the rock. The entrance is narrow, and to enter it is necessary to stoop; there is nothing to see but an altar with the image of St Thomas, where mass is occasionally said. Daylight is admitted by a narrow aperture, through which, it is said, St Thomas escaped the Indians who wished to slay him. In the vestry-room is a Missal with the date 1793. A dark cell full of bats is reputed to be the oldest part of the Church, where St Thomas himself worshipped.

At the N. of the Church there is a **Masonry Cross** on the top of a rock. From this spot St Thomas is said to have preached.

To the W. of the Church there is a cleft in the rock, which, it is said, was miraculously made by St Thomas to provide himself with water. The small Greek cross and foundation of a building are relics of St Thomas's prayer-house. At the foot of this rock, at the S. there is St Thomas's **Fountain**, which has water throughout the year. At the E. of the Church there are some rocks believed to be marked

with the prints of the feet, hands, and knees of St Thomas, where he lay prostrate on them when he was wounded. The general tradition that St Thomas was martyred on 21st December 68 A.D. at Mylapore, which H. H. Wilson (*Roy. As. Soc. Trans.*, 1, 161) identified with Mihilaropye, or Mihilapur, now St Thomé, is not accepted by modern criticism.

An annual feast takes place here in May, attended by about 30,000 pilgrims. This Mount is a small sanatorium to the people of Madras, and there are several houses to rent. At the top of the parochial house, about 90 ft. high, there is a visitors' room furnished; fine views of Madras, St Thomas's Mount, the Governor's House, Guindy, the King's Institute, Teachers' College, and the surrounding hills and country may be obtained from here. Visitors are welcomed, and a guide is available.

Beyond the Little Mount is Guindy Park, the **Governor's Country House**, standing in a large park with many deer. It has a very handsome appearance, being faced with the beautiful white *chunam* for which Madras is so famous; the centre room, which is used as a ball-room, contains a good bust of the Duke of Wellington. The flower-garden lies to the S., and is $8\frac{1}{2}$ acres in extent, and there are detached bungalows for the staff in the park.

The **Race-course**, close to Government House, is $1\frac{1}{2}$ m. long. On it is an obelisk to Major Donald Mackay, of the Madras Artillery, who was mortally wounded at the siege of Cuddalore (p. 659), in 1783.

St Thomas's Mount, or the **Great Mount**, 8 m. S.W. of Madras, lies S. of Guindy railway station; on the S. Indian Railway (7 m. from Egmore). It is one of the

most interesting places near Madras. At the base of the Mount are the *Cantonment* and the building which used to be the headquarters of the Madras Artillery. The mess-rooms are among the finest in India. Two companies of the British battalion at Fort St George and an Indian infantry regiment are now stationed here. Mention of St Thomas's Mount, which is known to Indians as *Faranghi Mahal* ("The Hill of the Franks") is made by Marco Polo as early as the 13th century. The name is derived from a very ancient belief that the Apostle St Thomas was martyred on this hill in 68 A.D., whilst kneeling on a stone which is now on the central altar of the Church. The stone has an inscription in Pahlavi (a dialect spoken in those days in the suburbs of Madras), which alludes to the apostolate and martyrdom of the saint in India. A Brahman is said to have transfixed the Apostle with a lance, relics of which are kept in the Cathedral at Mylapore. The Church in which this stone is kept was built on the summit of the hill by the Portuguese in 1547, so that it is one of the most ancient on the Coromandel coast. Over an archway is the date 1726, and within are several slabs with epitaphs. The main gate and portico were built by one C. Zacharias in 1707 A.D. Behind the altar and above it is a remarkable cross, discovered by the Dutch in 1547, with a Nestorian inscription in Sassanian Pahlavi of about 800 A.D. The inscription begins to the right of the top of the arch. Dr Burnell translates it: "Ever pure . . . is in favour with Him who bore the cross." Besides the stone, the Church contains a picture of the Virgin Mary, said to have been painted by St Luke, and brought by St Thomas to this place. The hill is about 250-300 ft. above sea-level, and has a flight of 132 steps, built by an Armenian.

In the 15th century the Nestorian Church in India fell into decline, until in most places it totally disappeared, but the declivities of the wooded hill continued to be the resort of Nestorian monks till the beginning of the 16th century, when the Portuguese built the Church and occupied it and the hill up to the present day. The Church is dedicated to Our Lady of Expectation, and is under the care of the R.C. chaplain at St Thomas's Mount.

Next to the Church there is a Convent of Franciscan Missionary Nuns of Mary, who are in charge of an Indian girls' orphanage and industrial school.

The English Church, a few hundred yards from the mess-house, is a handsome building with a well-proportioned steeple. There are monuments here to several distinguished officers.

Pallavaram (12 m. from Egmore) is the next station to St Thomas's Mount on the S.I. Railway. It was ceded to the British in 1750 and became a Cantonment in 1777: it is now used as a convalescent station for British troops. The hill is about 500 ft. high, with a long, low range extending for 3 m. S. 2 m. from the station is the site of old Pallavaram, where there are three rock-cut shrines ascribed to the 7th century A.D. One of these is now in the possession of Muhammadans, who have placed in it the *panja*, or hand symbol.

A pleasant excursion can be made by car from Madras to, 34 m., Chingleput, and, 19 m. further on,

Mamallapuram, or The Seven Pagodas (Route 34). For the road journey see Chap. VIII of *Topee and Turban*, by Lt.-Col. H. A. Newell (John Lane, 1921). The journey by house-boat on the Buckingham Canal is not recommended.

ROUTE 34.

MADRAS to **Arkonam**, thence by branch line to **CONJEEVERAM**, and **Chingleput**, for **MAMALLAPURAM** (the **Seven Pagodas**), and back to Madras.

No visitor to Madras should fail to make this excursion, as it embraces both Conjeeveram, "The Benares of the South," and the wonderful remains at Mamallapuram, which are known as the Seven Pagodas. The entire trip can be accomplished without difficulty by motor-car; Conjeeveram is 24 m. by road from Chingleput, and Chingleput is 34 m. from Madras. If the journey by rail should be preferred, the train should be taken at the **Madras Central Station** (M. and S.M. Ry. broad-gauge line to Raichur, Route 26) as far as

43 m. from Madras, **Arkonam** (R.); junction for a branch line (metre-gauge) of the S. Indian Ry. to Conjeeveram and Chingleput.

18 m. from Arkonam is **Conjeeveram** (*Kanchipuram*, the Golden City), one of the oldest towns of India, and one of its seven sacred places.¹ Travellers' bungalow: arrangements must be made for food. Inscriptions recently deciphered show the town to have occupied a position of considerable influence before the Christian era. In the 5th century B.C. Gautama is said to have converted the people of Kanchipuram, and in the 3rd century B.C. Asoka is said to have built many Buddhist topes in the neighbourhood, though none now remain. In the 1st century A.D. a powerful race of Kings ruled in the Southern Dec-

can, building forts and Palaces in the basin of the Palar, and carrying on an extensive commerce both with West and East. The Pallava Kings were from the earliest historical times renowned for their learning and skill in war; they bestowed liberal patronage on learning and architectural arts. As their capital city, Conjeeveram is famous in ancient Indian history. The larger Dravidian temples (of comparatively recent date) are at the present time the most conspicuous objects; but the special attractions are the Pallava temples, which are among the oldest known examples of Hindu architecture in S. India.

The most important of the group of *Pallava* structure is the *Kailasanatha* Temple, one of the most remarkable architectural monuments, alike for the extent and beauty of its sculptures; it stands in the fields some distance to the W. of the town. For a S. Indian temple its plan is somewhat peculiar. It is comprised in a large and a small courtyard, with a central group of shrines placed towards the W. extremity of the large one. The central shrine is surmounted by a lofty pyramidal tower. The entrance to the central *vimana* is from the E. and N. At each corner, and on the N., S., and W. sides, is a shrine. Each of these shrines and the porch have a smaller tower, which rises up to and is grouped alongside the greater one. Near the base at each corner and face, between the projecting shrines, a large Nandi (sacred bull) is placed on the ground.

On each side of the large court there is a continuous series of cells, each with a small tower and *sikhara* over it. This peculiarity of the group of cells ranged along each side of the courtyard has given rise to a belief that this must originally have been a Jain temple; but in the great wealth of sculpture represented there is

¹ Of the other six (see p. 87), three are sacred to Siva and three to Vishnu. Conjeeveram is sacred to both.

not a single figure which could be called Jain. These cells were originally occupied, not by devotees, but by *lingas*, each with a separate name and representing a different manifestation of Siva. The inscriptions on the face of each are mostly in an early palæographical form of *grantha* character. A notable peculiarity is the scrolled foliation attached to letters of these inscriptions. The latter give either the names of the different *lingas* or the titles of Kings who erected the building. The *sikharas* on these cells originally stood with their summits appearing above the wall-head of the court, with elephants and Nandis placed alternately on the wall-head between them. But at the present day the modern owners of the building have blocked up the spaces between these *sikharas* with masonry composed of stone, brickwork, and mud, so that the outside of the court forms a continuous line of dead wall. The superincumbent weight of this additional masonry has caused large gaps and cracks in several parts of the walls on which it is placed. The cell towers show on the inside of the courtyard wall. On the N. and S. sides of this court the cells directly opposite the central *vimanas* are larger than the others, and have higher towers over them.

In front of the large central shrine to the E. is the *mahamandapam*. It originally stood detached from the central shrine, but now it is found joined to the shrine by the *ardhamandapam*.

Between these two mandapams is a perforated stone window. The *mahamandapam* has massive piers, on one of which there is an inscription saying that King Vikramaditya made a grant to the temple. The piers in the *ardhamandapam* are different. Those in the latter are widely-spaced, slender columns, and are of a later structure, evidently

built in the time of the later Vijayanagar Kings.

A wall stands between the large and the small courts, and a small temple stands in a line with the centre of this wall. On either side of this temple there are doors which serve as entrances from the one court to the other. Ranged along the E. face of the small court are eight small shrines, each with a tower over it. These shrines deserve careful study. They closely resemble in design the *raths* of Mamallapuram. The spaces between these are now filled with rubble work, blocking up the sculptured panels on the sides.

To the E. of the temple stands the *nandi mandapam*. The basement only remains. There are four *yali* piers at each corner. It must have had a roof, but now there are no traces of it.

At the E. elevation of the temple there are eight small shrines standing in a row from N. to S. on each side of the E. entrance. Evidently the work is incomplete. Each of these shrines is called a *rath*. That on the extreme left stands completely detached from the rest. It is in shape a square, and has carved figures of Siva and Parvati in a sitting posture on the back. On the exterior wall are the *yalis*, partly carved, each *yali* supporting a pilaster with moulded caps over. On the back and sides are rough blocks and panels. Between these panel spaces and the corner *yalis* are small pilasters.

The small platform in front has *yali* piers, whose capitals only are complete; there are traces of carved floral ornaments on the cornices, and a series of small mouldings with carved projections at intervals; the octagonal-domed *sikhara* has carved pedimental ornaments on each side.

The *rath* to the right of the last is more complete, as is evident from the fact that the *yalis* on the

piers and the dwarf-pals on each side of the door panels on the exterior of the walls are all carved. Siva is seated under a tree with long, matted hair and a *naga*, or serpent, on his left.

The doorway to the E. court has *yalis* at the corners, pilasters on the angles of the doors, and a cornice over it. Above the cornice is an upright portion of wall rising above the court walls on either side. In the centre of this is a panel with Siva and Parvati and attendants.

Brahma and Vishnu are shown worshipping them. The other *raths* are more or less of the same type. The *yalis* of each of the *raths* differ, some having tusks and twisted trunks. The inscriptions on the granite portion of the *raths*—some in Pallava *grantha* character—also deserve careful study. The panel on the Northern side of the last *rath* has a standing figure of Siva with matted hair, two hands, and a serpent over his shoulder. Over the panelled niche in which the figures stand is a floral pedimental ornament only partly carved. The central portion shows representations of two *yalis* with a drooping floral ornament on each side—a thing very common on most of the niches in the temple.

The sculpture on the back of the successive *raths* should be noticed. Behind the back of the *rath* on the extreme N. is Siva on an elephant, with the death-noose in his left, the trident in his lower right hand, and a *naga* in the lower left, and his right foot uplifted on the elephant's head. He is represented as stripping the elephant's skin, which he waves aloft in his two upper hands.

There is a group of posed female figures on some of the small panels, and on the back of the sixth *rath* is a chariot drawn by two horses, with the figure of Siva in a boon-conferring attitude.

In the large courtyard there

are twenty-two pilasters placed at regular intervals on its N. exterior side. Each pilaster has a *yali*, with rider seated on reverse sides, at each alternate bay.

On the W. exterior side, in the entrance, is a gateway with a small tower. An elephant and *gandharva* are seated on the wall-head, and an upper central panel has Siva seated with his hand across his knees. On this façade of the court wall there are five *yali* pilasters on either side of the central doorway. The S. exterior side is spaced by similar pilasters. *Sikharas*, elephants, and *Nandis* are exposed to view here.

In the small court on the interior side of the small wall the sculptures are all figures of Siva in different postures. The most noticeable sculpture is that on the large panel to the right. It has a group of twelve sages, evidently listening to the exhortations of Siva, who is seated under a banyan-tree in a panel opposite this one on the S. side wall of the central shrine in this court. On another large panel eleven seated sages are similarly listening to Siva, armed with different symbolical weapons, and seeming to preach war.

The next shrine of this temple to be observed is the small one in the centre of the wall dividing the lesser and larger courts. This is at present known as the *Narada Linga Shrine*. The lower bases have two courses of granite, over them a freestone course; *gandharvas* are sculptured on this third course. They have their hands raised over their heads with the palms of their hands flattened against the moulding above, as if they were intended to be shown as supporting the building.

In the exterior of the porch on the right side is a row of *hansa*, or sacred swans. The panel opposite the last on the inner side of the porch has a large finely-carved figure of Siva, with matted hair

and his right knee bent; he has a richly-carved crown, and ornaments on the neck, arm, and leg. Over his left shoulder is a garland of (apparently) bones. Another has alternate square and round ornaments, on each of which is a sculptured skull. The details of this panel are remarkably striking in the arrangement and execution of the whole design, even the smallest ornaments being clearly and beautifully cut.

The exterior of this shrine is again full of sculptures—all representations of Siva. The features of all these figures have a marked form of countenance. The noses are pointed and flat, and give a curious expression to the face, and it is believed that they represent *kurumbars*, common among some of the tribes in early times in this country.

The *mahamandapam*, in the central portion of the large court, has some strikingly archaic details. It has massive stone piers, with heavy square capitals and inscriptions on them of a later date. The piers are without bases. The capitals are of one design throughout—square with great projection. Several have circular lotus discs carved on the faces of the lower and upper square portions. These were evidently intended to support some great overhead weight. The perforated window which leads into the *mahamandapam* is much older than the building in which it now is, and is of black stone. The perforated work is a series of twisting boughs with openings between partly filled by cross-buds. Over the opening is a triple cornice with horseshoe-shaped panel; in it is a figure of Siva with eight arms. On the circumference of the panel is a leaf ornament springing from *yalis* at the foot. The sculptures at different elevations of the *mandapam* are mostly figures of Parvati in different postures. In the lower right panel of the S.

elevation is the figure of Lakshmi seated on a lotus flower, holding lotus buds, conch, and Chakra. In the pier of the minor panels on each side are *chauris*, elephants, *gandharvas*, and attendants. Some of the walls are quite plain, without ornaments of any kind.

Adjoining is the *vimana*, with the principal shrine in the centre. Around the *vimana*, and in the recess formed by the projecting exterior shrines, are a series of Nandis placed on the ground and facing the different quarters. At each of the corners formed by the projecting shrines, and extending around the *vimana*, are series of triple *yalis* and riders, intended to represent a support and guard to the temple. The figures sculptured on the exterior ground storey of the *vimana* are again representations of Siva, Brahma and Vishnu worshipping him, and of Parvati.

The general elevation of the superstructure is a small tower over each of the exterior shrines at the corners and façades. The *sikharas* over the shrines at the corners are square, and over those on the façades are semi-barrel shaped. Above those on the main tower is a storey with a series of two weather-worn sculptured panels on each face of the central projection, and one at each corner. Over this is a double cornice with small *sikharas*; the storeys above are successively stepped back, forming a slight platform between each. The tower is capped by an octagonal *sikhara* with small pediment on each front. The whole tower is plastered over, and the plaster faithfully represents the underlying stone-work, but the plaster-work is much coarser in execution. The stone carvings are without exception beautifully and minutely chiselled.

The *Vaikunta Perumal* Temple is one of the eighteen important Vishnu temples of Conjeeveram where worship is still conducted. It stands about three furlongs

S.W. from the railway station, and almost due E. from the Kailasanatha temple. The most important and interesting feature is the building of the *vimana* tower, which has tiers of three shrines one over the other, with figures of Vishnu in each shrine. The sculptures on the different sides of the *vimana* represent scenes from the Puranas.

There are two covered Prakaras of the shrine, and the courtyard has a covered veranda on the four sides. As usual, the shrine is entered from the E. and through an *ardhamandapam*, with its eight *yali* piers and four pilasters and sculptured panels. On the E. side of the courtyard the *mahamandapam* is entirely roofed over the unfinished gopuram built by the later Vijayanagar Kings.

There are figures on the right and left side of the entrance gopuram, exhibiting the same abundance of detail and sculpture seen in the Kailasanath temple. The design again has been well thought out and systematically expressed in stone to produce an architectural effect.

S.W. from this temple, and at a little distance, stands the *Matangeswara* Temple, right in the midst of fields. Its plan is simple—a small shrine with massive walls and entrance through a pillared porch; there is a similarity between this and the Kailasanath tower.

The tower over the shrine is hollow. It is square and built in three storeys. The pillars at the porch are distinctly of the Pallava type. Each has a lion base, the tail of the lion being curved up the back of the pillar. Over the lion is an ornamental band with polygonal-sided necking, large projecting capital, and a square abacus over.

The back of the porch has pilasters responding to detached piers with figured panels on each side. The pilasters at the corners

have *yalis* and riders. The N. and the E. walls have Saivite figures and sculptured panels between the pilasters.

Of the latter Dravidian temples, the most important is that of *Varadaraja Swami*, a form of Vishnu, at **Little Conjeeveram**, about 2 m. from the railway station. The street at the E. extremity of which this temple is situated is one of the features of the town. The tower and the outer high walls enclosing the temple appear quite modern. One of the most ancient at Conjeeveram, the building has been renovated within the last four hundred years, and looks quite modern. The tower is about 100 ft. high, and has seven storeys. It contains no figures or representations of Hindu deities. The original builders apparently intended to build it higher than it is. The tower at the E. extremity of the temple, just opposite the one at the main entrance, is higher than the latter, and evidently more ancient. Until a few centuries ago the E. tower was the front one, the idol of the temple faced E., and the town extended to the E. of the temple in the part now deserted. There are two tanks adjoining the towers. These are fine structures nearly squared, with sides sloping to the bottom in gradual rows of cut granite steps. The tank at the E. tower is much the older.

Within the first courtyard are the singularly beautiful pavilions, with painted roofs resting on four tall, slender pillars. These are situated in front of the flag-staff and a monolith column of granite intended as a lighting-place. The remarkable *Hall of Pillars*, to the N. of the *mandapams*, is one of the beauties of S. India, and deserves careful observation. It is a work of considerable merit; the execution and finish of the sculptures are most attractive. The *mandapam*

has often felt the rude shock of wars, and hence the figures are slightly mutilated, apparently by shot and sword. The sacrilege is ascribed to Muhammadan invaders, and to Hyder in particular. The hall has ninety-six pillars, carved at the base into horsemen and hippogriffs. The carvings on the pillars are mainly illustrations of the Avatars of Vishnu and incidents mentioned in the *Ramayana* and *Mahabharata*. There are a few lay-figures of great interest. In the fourth pillar from the W., at the N. extremity, facing the tank, there is a figure of a Rajput warrior with a gun in his hand. At the top of this pillar there is a grotesque figure of the god of death. Each of the corner stones on the roof of the hall is a monolith of great size. Not only are parrots, snakes, etc., sculptured on the top, but a chain is also cut which originally hung down nine feet. The story is told that Hyder wanted to try the strength of his sword and cut them to pieces. The chains are now connected together by iron rings.

Into the second court non-Hindus are not permitted to enter. The colossal cars, or *vahanams*, on which the idol is carried in procession on the occasion of the Brahma Uthsavam festival in May of every year are of great beauty. This temple is also famous for its umbrellas. A pair of the largest and the best of these cost Rs.750. The jewels of this temple are not so valuable as those in Tirupati or Sri Rangam, but the workmanship is of a very superior order. They will be shown by the trustee, if desired. Among them is a necklace, worth Rs.8600, which is said to have been given by Clive. At this temple there is a periodical recitation of the Vedas by the Aiyangar Brahmans of this place. On the occasion of a grand festival so many as 1000 congregate for its recitation.

About 3 m. from this temple due N.W. is the famous Siva shrine of *Ekambaranath*, in the larger Conjeeveram. The route between the two towns is studded with a number of important temples—a few dedicated to Vishnu and a large number to Siva. In and around Conjeeveram there are said to be a thousand temples and ten thousand lingams. About 1 m. from the Vishnu Conjeeveram is the magnificently-carved wooden car, very high, with massive wooden wheels. In Hodgsonpet the cloth bazars have the silk-bordered clothes for which Conjeeveram has always been famous. The chief street of Conjeeveram leads to Ekambaranath Temple, which has a sixteen-pillar *mandapam* in front of it. It is quite a modern structure. To the N. of this *mandapam* is the main tower of the temple—a massive structure 188 ft. high, divided into ten storeys. It was built by Krishna Devaraja of Vijayanagar in 1509. From the topmost storey a grand view is obtainable of the whole town and its surroundings. No two towers of the temple are opposite each other, no two walls of the temple are parallel, and there is hardly a right angle in the place. All these create a picturesque effect seldom surpassed, though they lack considerably in dignity. Through the gateway a large open space is entered, to the left of which is the "Hall of a Thousand Pillars" (really 540); most of the columns are beautifully carved and support richly-decorated friezes. In the centre of the hall are a number of grotesque wooden figures, which are taken out on occasions of processions. Into the interior of the temple none but caste Hindus are allowed to enter.

This temple has often felt the shock of war, and was sometimes used as barracks and hospital. It served as a fort for some years

during the Carnatic wars, and was attacked by Hyder Ali. From this building Sir Hector Munro, the victor of Buxar (p. 61), retreated to Chingleput on learning that Col. William Baillie's force, which he had failed to support, had been cut to pieces by Hyder Ali at Pollilore (see below), a few miles away.¹ To the S. of this temple, and on the outskirts of the town, is the Sarvatiratham Tank, into which Munro threw his guns and baggage. It is the finest tank in Conjeeveram, and the only one in which there is anything like decently clean water. Its four sides are studded with little pagodas. It is greatly frequented by bathers and worshippers.

About five furlongs from this tank is the temple dedicated to *Kamakshi*, the "Loving-eyed" Parvati. The consort of Siva is worshipped in Kasi under the name of the "Broad-eyed," in Madura as the "Fish-eyed," and at Conjeeveram by the name of *Kamakshi*. This ancient temple is believed to contain the *samadhi* of Sri Sankara. About 2 m. from the borders of the town is a famous Jain temple of the Chola era in the village on the bank of a river. Its florid architecture and the sculpture in the cloistered court which surrounds it are worth seeing.

At Pullalur (Pollilore), 15 m. N.W. of Conjeeveram, which was the scene of Baillie's disaster in 1780, are two lofty obelisks commemorating the death of two officers in the engagement fought on the same ground by Sir Eyre Coote, on 27th August 1781; Hyder Ali claimed this as a drawn battle.

39 m. from Arkonam is **Chingleput** (R.); junction for **Madras** (**Egmore**), 35 m. by the main line of the S. Indian Railway (Route 36).

¹ The best account of the disaster is given in the *Lives of the Lindsays* (vol. iii. p. 255), by the Hon. John Lindsay, who was himself taken prisoner.

Chengalpat is said to mean "the brick hamlet"—possibly because it was more substantially built than the grass-hut villages in the neighbourhood. It is the residence of the District Judge.

The **Fort** stands on the margin of an irrigation reservoir or tank. It is of Vijayanagar origin, and was built in the 16th century, after the Battle of Talikota in 1565, when the power of the Vijayanagar kingdom was broken by the Muhammadan Kings of the Deccan. A slab embedded upside down in one of the ramparts evidently relates some deed of Narasimha, who was the founder of the second Vijayanagar dynasty. Tradition states that the Fort was built by Timmu Raja, an offshoot of the royal house, after their flight to Chandragiri. It is certainly a typical Hindu structure, built after the model of Gingee, "the modern Troy." The walls are formed of roughly-dressed stone, hewn for the purpose by families of workmen, who affixed their marks to the stones. It is nearly a parallelogram, 400 yds. by 320 yds. About the year 1639 the Chingleput District was taken possession of by Mir Jumla, the General of the King of Golconda, and, on the fall of Golconda in 1687, it passed with the rest of the Carnatic into the hands of the Mughal Emperors. The French acquired possession of the fort in 1751, and it was taken by Clive in 1752. During the struggle for supremacy in the Carnatic it was used by the English as a base for keeping stores, as a place of confinement for French prisoners, and for harassing the rear of Lally's army, which was investing Madras in 1758-9. It was handed over to the English as a *jagir* in 1760 by Muhammad 'Ali, Nawab of Arcot, for services rendered, and the grant was confirmed by the Mughal Emperor in 1763.

During the wars with Hyder

Ali, it was once taken and twice unsuccessfully besieged. On the latter occasion it was relieved by Sir Eyre Coote in January 1781. Since then the fort has remained in the hands of the English. It is now partially in ruins and the railway runs through it. The royal apartments, the granary, the barracks and armoury, have all been razed to the ground and a Reformatory School has been established in the fort enclosure; but two old buildings still exist.

The *Raja Mahal* is also known as *Ther Mahal* (Ther=car), on account of its shape. Timmu Raja built this "Ther Mahal" exactly in the form of the Conjeeveram car of Varadaraja Swami (p. 632). It is the best architectural relic of the Vijayanagar Kings, and originally consisted of five storeys built in wedding-cake form; one of the five was subsequently pulled down. The unusual height of the structure was due to the fact that the Ranis of the Palace desired to worship daily at 12 o'clock, in sight of the temple of Conjeeveram. A series of arcades of Moorish arches surrounds a small inner dome-shaped room without a single piece of wood in its entire construction. The roof of the dome-shaped room in the first storey is decorated with plaster-work, and was evidently used as a *mandapam* for the habitation of the household deities. The staircases were straight, were all located inside, and ran parallel to and above each other from one storey to another. The steps are extremely narrow.

The lower storey of the residence of the Deputy-Superintendent of the Reformatory School was a Hindu temple, built for the use of the Prime Minister of the Raja. When the Fort was taken by the Muhammadans it was partly converted into a mosque, and the Muhammadan arch and the Hindu pillar exist side by side. The English period is represented by

the upper storey, from the veranda of which a picturesque view is obtained, with the tank in front and a background of hills.

In the town is a temple dedicated to the monkey-god Anjaneya, who was a devotee to Kothandaramaswami (Rama with a bow). This was once within the fort and was removed in 1813 with the permission of the E.I. Company.

Chingleput is the centre of the Tamil Missions of the Free Church of Scotland.

Snipe shooting is to be had during the cold season.

1 m. from Chingleput are the Pallava Caves of Vallam, with archaic inscriptions.

From Chingleput it is 19 m. by motor-car or motor-bus to **Mamallapuram** (Mahabalipuram), or the **Seven Pagodas**, one of the most remarkable places in India.¹ There is a good road through Tirukalikunram (p. 638) to the Buckingham canal, which is crossed by ferry boat. There is a furnished two-roomed D.B. at Mamallapuram: no servants except the watchman, and supplies are difficult to get.

The popular name of the Seven Pagodas is Mavalavaram, or **Mahabalipuram** (a Sanskritised form of **MAMALLAPURAM**), which was believed to connect the town with the demon Mahabali, overpowered by god Vishnu in his *vamana-avatara*, or dwarf-incarnation; but the derivation of the name from the demon Bali is now given up. It has been suggested that the village owes its existence to the Banas, who claim their descent from the demon Mahabali, or Mahabali-chakravartin. There

¹ A full description of the excavations and carvings at Mamallapuram will be found in the *Cave Temples of India*, by Mr Fergusson and Dr Burgess, and in the collection of papers published by Captain M. W. Carr in 1869. See also Fergusson's *Ind. Arch.*, 1, 171, 327-342; *The Seven Pagodas*, by J. W. Coombes; and *Archéologie du Sud de l'Inde*, Vol. I., by G. Jouveau-Dubreuil (Paris, P. Geuthner, 1914).

is, however, no evidence to show that the Banas extended their dominions so far. But in ancient Chola inscriptions found at the Seven Pagodas the name of the place is Mamallapuram; this is evidently a corruption of Mahamallapuram, meaning the "city or town of Mahamalla" ("the great wrestler"), which occurs as a surname of the Pallava King Narasimhavarman I. in a mutilated record at Badami (p. 581) in the Bombay Presidency, which he claims to have captured. The earliest inscriptions on the *Raths* at the Seven Pagodas, in the opinion of Professor Hultzsch, are *virudas* of a King named Narasimha. It is thus not unlikely that Mahamallapuram, or Mavalavaram, was the original name of the village, and that it was founded and named after himself by the Pallava King Narasimhavarman, the contemporary and opponent of the Chalukya Pulakesin II. (A.D. 609-42).

3 m. N. of Balipitham, the landing-place for the modern village of Mamallapuram, is Saluvan Kuppam, with two cave temples. One of these is usually filled with drift-sand. The other is quaintly carved with nine lions' heads round the cells, and has two elephants' heads under miniature cells to the right of it. Running S. from Balipitham, and between the canal and the sea, distant nearly $1\frac{1}{2}$ m., is a low granite ridge rising about 120 ft. above the plain in its highest part. Upon this ridge are various excavations and carvings; on the E. face of it is a famous relief of the *Penance of Arjuna* (p. 637), and 700 yds. beyond the S. extremity of it are the five monolithic temples called the *Raths*, all works, it is believed, of the Pallavas (p. 627), and dating from the 7th century A.D. The modern village lies E. of the great relief, and the old temple lies beyond it again on the seashore. The

visitor can proceed in his boat to opposite the *Raths*, or by foot from Balipitham along the top of the ridge, or below its Eastern side, as he may feel disposed. Every one will probably prefer to visit the *Raths* first, as they are absolutely unique in the whole of India, and then to examine the relief.

The monoliths known as *Raths* may be assigned with considerable certainty to the Pallavas. The Dharmaraja Rath, the Ganesa Temple, the Dharmaraja-mandapa and the Ramanuja-mandapa bear inscriptions which prove beyond doubt that they were all excavated by Pallava Kings. The Ganesa Temple and the Dharmaraja-mandapa are called *Atyantakama Pallavesvara-griha*. The same name is engraved on the outside of the third storey of the Dharmaraja Rath. Perhaps the last was completed by Atyantakama, who might have constructed the remaining *Raths* as well as the Ganesa Temple and the Dharmaraja-mandapa. The Saluvanguppam Cave, situated about $\frac{1}{2}$ m. N. of Mamallapuram, was excavated by Atiranachanda-Pallava, and was accordingly called Atiranachanda-Pallavesvara-griha. The identity of Atyantakama and Atiranachanda with any of the Kings known from the copper-plate grants remains to be established by future researches. The Chola inscriptions in the Shore Temple at the Seven Pagodas mention three shrines at Mamallapuram—viz., Kshatriyasimha-Pallava-Isvara, Rajasimha-Pallava-Isvara and Pallikondaruliya-devar, which were apparently situated in the temple called Jalasayana—i.e., the Shore Temple. Kshatriyasimha-Pallava-Isvara was in all probability the ancient name of the principal shrine in the Shore Temple. Rajasimha-Pallava-Isvara might be the name of the smaller shrine in the same

temple, while Pallikondaruliya probably denotes the shrine connected with the larger temple, where a large mutilated statue of the god Vishnu is lying. It is probable that the Pallava King Rajasimha built the smaller of the two shrines which go by the name of the Shore Temple. It is also possible that Kshatriyasimha was another name of the same King. In this case the whole of the Shore Temple must have been built by the Pallava King Rajasimha, who constructed the Kailasanatha Temple at Kanchipuram about the beginning of the 8th century A.D. Besides these there are a number of caves which bear no inscriptions, but which may also be assigned to the Pallava period.

The most Northerly of the Rathas is called after Draupadi, the wife of the five Pandavas (see p. lxii, Introduction). It is the smallest of all, measuring only 11 ft. sq., and has a pointed roof, like that of a thatched hut, rising 18 ft. from the ground, and once crowned by a stone finial. The image of a goddess carved inside the shrine is popularly explained as Draupadi, but more probably represents Durga. At her feet are two kneeling figures, one of which is shown in the act of making an offering of his hair. W. of this Rath are an elephant and a lion carved out of single blocks of stone, and E. of it is a *Nandi* bull. These animals are the vehicles (*udhanas*) of the thunder-god Indra, the goddess Durga, and Siva, and were presumably intended to be placed in front of the respective shrines. The second Rath, popularly named after Arjan, was probably in reality a temple dedicated to Indra, whose effigy is shown in a niche in the back wall. Like the fourth named after Dharmarāja (or Yudhishtir), it is a copy of a terraced Buddhist Vihāra. The so-called Dharmarāja is in reality a Siva temple built

by the Pallava king Narasimharman, who reigned in the first half of the 7th century. The first, which is three-storeyed, measures 11 ft. sq. and is 20 ft. high; the cell in the interior is only partly excavated. The second measures nearly 27 ft. by 29 ft., and is 35 ft. high; it has four storeys, three with simulated cells round them, and the fourth of a dome-shape, reminding one of the crowning cupola of the Great Temple at Tanjore. In each round window decorating the cells is a head as of a monk looking out of it. The basement storey has round columns of the Elephant type (p. 29), with lions at their base. Between these two Rathas is that of Bhīma, and W. of this, and outside the line of the other four, the Rath of Sahadeva and Nakula. The former is the largest of all, measuring 48 ft. by 25 ft., and rising 26 ft. from the ground. Only part of the hall has been excavated, the pillars having cushion capitals and lion bases (see above). The carved roof of the upper storey closely simulates the wooden form of a free structure of the kind. The fifth Rath is smaller again, 18 ft. by 11 ft. by 16 ft. high; it has an apsidal end on the S. side, and is intended to represent a Chaitya (p. xcvi, Introd.). At the N. end is a porch with two pillars in front of a cell, beyond which excavation of the Chaitya never proceeded. Simulated cells are represented on the terraces of this Rath also. Each of these works is carved out of a single mass of stone, and probably these masses once formed a detached continuous outcrop of the rocky ridge.

Proceeding N. from the Rathas to the Southern extremity of the ridge, there will be found on the isolated rocks near the E. corner a representation of a Penance of Arjuna, and on the W. side the Varāhaswami Temple, used for Hindu worship and not accessible.

Between these, rather farther to the N., is the Yamapuri or Mahishamardini *mandapam*, a cave 33 ft. long and 15 ft. deep, with representations of the combat between Durga, wife of Siva, and the buffalo-headed demon, and of Vishnu reclining on the Shesh Snake; at the back of the cave are three cells. Farther N. again, beyond various incomplete excavations and the Ramanujya *mandapam*, a cave 18 ft. by 10 ft., with two pillars resting on lions' heads, are the excavations known locally as the throne or couch of the Dharmarāja, and the bath or vat of Draupadi, nearly opposite the fine gateway of the Vishnu Temple, known as the Rayula Gopuram, which was begun about the 12th century, on the E. side of the ridge above the great bas-relief, but was left only begun. To the N. of the gopuram is a very graceful monolithic temple, called after Ganesha, measuring 19 ft. by 11 ft., and rising 28 ft. from the rock. It has three storeys, the two lower with simulated cells, and the carved roof of the topmost carrying a row of finials; the pillars of the base are of very slender and wooden form. N.W. of this, and facing W., is a cave, 19½ ft. by 9½ ft., with bold representations of (1) the Varaha, or Boar incarnation¹ of Vishnu;

¹ The representation of the *Varaha* incarnation is fairly well done, but unfinished. The central figure is the four-armed Vishnu with a huge boar's head, who lifts up the Earth Goddess and places his right leg on the head of a snake-headed figure issuing from the waves. The latter is the giant Hiranyāksha, "Golden eye," who had carried off the earth into the infinite abyss. Vishnu with the head of a boar, "pursued and slew him and saved the Earth." The representation of the *vamana-avatara*, or dwarf-incarnation, is very spirited. Vishnu, dilated to an immense size, places one foot on the earth, and lifts another to the sky. The god has eight arms, with which he holds a sword, a quoit, a mield, a bow, and a lotus, and with one free point. The other two are indistinct. Worshipers or attendants are at his feet, and other figures appear in the skies. One to the W. has the head of a dog. The

(2) elephants pouring water over Lakshmi; (3) Durga; (4) Mahabali and the Dwarf (Vamana) incarnation. Farther N. again is one cave on the W. side and another on the E. side known as the *Isvara mandapam*, containing three shrines with statues of the Hindu Triad; there is a large stone bowl in front of the cave, and at the back of it a relief of elephants, and a monkey and a peacock. Just beyond the N. end of the ridge, and near the hamlet of Pillaiyan Kovil, is a life-like sculpture of three monkeys in the round.

To the S. and below the E. face of the ridge the **Great Bas-relief** of the **Penance of Arjuna**, 90 ft. long and 30 ft. high, will be found at the back of the village temple, also probably dating from the 7th century. The N. half of the relief is occupied below by two life-size full-grown elephants and four small ones, and above by a crowd of figures hurrying to the centre. In the rift between this and the Southern face is a statue of the Nag Raja, overshadowed by a seven-hooded serpent, and of his wife below him, with other serpent-crowned figures and animals. On the Southern face is Siva with an ascetic, from whom the relief is named the Penance of Arjuna, on his left, and a large number of dwarfs, flying figures, human beings, and animals, including lions, monkeys, hares, deer, and birds, round him. S. of the relief is a large unfinished cave, known as the *mandapam* of the Pancha Pandavas, with two rows of pillars and models of cells on the façade; and farther again and not far

legend is that when Bali became Ruler over the whole earth Vishnu approached him in the shape of a dwarf, and asked for so much space as he could cover in three steps. Bali granted this modest request, whereupon Vishnu dilated to immense proportions and planted one foot on earth, one on the sky, and with a third thrust Bali down to Hell.

above the S.E. corner of the ridge is the Krishna *mandapam*, of later date than any of the other excavations, supported by twelve columns in four rows, and containing at the back a sculptured relief of Krishna holding up the mountain of Gobardhan (p. 261). The central figure of a cow being milked is very natural.

A path leads from the bas-relief past a fine tank to the *seashore temple*, dating from the 8th century. It is one of the oldest Dravidian temples extant, and is in the form of a five-storeyed vihara about 50 ft. high and 60 ft. at the base (*Ind. Arch.*, I, 362). Inside the temple is a fallen lingam, and inside a vestibule on the W. of it is a recumbent figure of Vishnu, 11 ft. long; 75 ft. distant in the sea are the remains of a *dipa stambha*, or lamp pillar. S. of the temple are two rocks with recesses surrounded by lions' heads excavated on their W. side. In front of these is a stone lion, and at the back an elephant's head and a horse. Excellent sea-bathing may be had near the shore temple, but care must be taken not to venture out too far.

On the way back to Chingleput, a halt may be made at **Tirukalikunram**, where the road branches, the S. branch going to Sadras. There are two very fine temples—one on the hill and one in the village—a spacious and beautiful tank with steps all round, and a rock-cut temple, on whose pillars are many Dutch and some English signatures, ranging in date from 1664 to 1687 A.D. The temple in the village is full of ancient inscriptions. Tirukalikunram, "the sacred hill of the kites," or Pakshithiratham, "the sacred place of the birds," is a place of pilgrimage, and hundreds of pilgrims flock almost every day to see two sacred kites sumptuously fed on the top of the hill, from the hands of a priest, at the temple's expense.

Sadras (D.B. fairly good), an old Dutch settlement (founded in 1647) lies on the canal 3 m. S. of Mamallapuram. The place, like Masulipatam, was once famous for its printed cottons. The ruined Dutch fort and the old Dutch cemetery are the principal objects of interest. Sadras was taken by the British in 1795 and restored to the Dutch in 1818; six years later it was made over to the British by treaty, together with Chinsura (p. 133) and the rest of the Dutch settlements in India, in exchange for Fort Marlborough and other places in Sumatra.

ROUTE 35.

MADRAS to MANGALORE by way of Salem (for Yercaud and the Shevaroy Hills), Erode, Podanur (for Coimbatore and the Nilgiris), Olavakkot, Shoranur (for Cochin), Calicut, Tellicherry, and Cannanore; and from Mangalore to Bombay by sea.

The broad-gauge line of the South Indian Railway to the Nilgiris and Mangalore actually commences at **Jalarpet Junction** (Route 32, p. 608), 132 m. from Madras Central. The journey as far as (43 m.) **Arkonam Junction** (Route 26), and thence to Jalarpet, is made over the Madras and S. Mahratta Ry. system, on which the S.I.R. have running powers.

From Jalarpet Junction (R.) the stations are (mileage from Madras)

137 m. **Tirupattur**. Light ry. to **Krishnagiri**, 26 m., one of Tipu Sultan's forts, in what was known as the Baramahal.

167 m. **Morappur**. Light ry. to **Hosur**, 73 m., from which

a large Army Remount Depot is $2\frac{1}{2}$ m. distant.

207 m. Salem Jn. Stn. (R.). Salem town (pop. 52,244) is the headquarters of the District of the same name; and is on a branch, $3\frac{1}{2}$ m. from the Jn.

Motor-bus services to Rasipur, Namakkal and Attur.

The Shevaroy Hills. Motor omnibuses run from Salem Junction to Yercaud (21 m.) by the ghat road; charges vary according to the season and the demand, but Rs.1-8-0 is generally asked for the upward, and Re.1 for the downward journey. Coolies can be hired for light packages; heavy luggage can best be sent by cart (Rs.5-6) from Salem. The scenery along the whole length of the road is magnificent. The road surface is good and the gradient moderate. There are, however, a number of hairpin corners, which are not easy for a car with a long wheel base.

Yercaud (depot for petrol in the Tipperary Hotel compound) is a small town, the height of which varies from 4000 ft. (at the lake) to about 4800 ft. above sea-level. It is essentially a place for a quiet holiday. Bungalows are frequently available for a moderate rent in the season (April to June). Most of them have picturesque gardens, the climate of the hills being peculiarly good for gardening operations and horticulture. Many imported trees and plants flourish. There are a Church, a Club, a Post and Telegraph Office, and several medical practitioners. The summer climate varies from about 65° F. to about 78° F. In winter the thermometer goes down to 45° F. or lower.

Yercaud and its surroundings, though they cannot vie with the Palnis and the Nilgiris in grandeur of scenery, are unrivalled in S. India for picturesqueness: nowhere else can so many beautiful sights be seen with so little trouble by a fair

walker. A few of the best viewpoints are given below, with their approximate distances from Yercaud (Church gate):—

	Miles.
Ladies' Seat	$1\frac{1}{2}$
Prospect Point	$1\frac{1}{2}$
Bear's Hill	$1\frac{1}{2}$
Pagoda Point	2
Kiliyur Falls (after rain)	$2\frac{1}{2}$
Shevaroyan (5314 ft.)	$3\frac{1}{2}$
Honey Rock	$6\frac{1}{2}$
Shengalvaray Precipices (2 m. of difficult walking)	14

The Shevaroy Hills cover an area of about 100 sq. m., the elevation ranging from about 3500 ft. to about 5300 ft. There are excellent roads; the gradient is steep in places but negotiable by motor-cars and motor-bicycles. The district consists mainly of coffee estates, broken up by picturesque villages and "greens," inhabited by hill-folk (Malayalis). Only the highest points (especially the Shevaroyan and the Green Hills), are cultivated and covered with short grass, varied by *shola* (evergreen hill-trees). The amount of rubber is small at present compared with the area under coffee. The hospitality of the planters of the Shevaroy Hills is proverbial. A visitor armed with an introduction will find a visit to a coffee estate full of interest and instruction. Botanists and entomologists will find a visit to the Shevaroy Hills a profitable investment of time.

243 m. Erode junction station (R. and D.B.). Motor service to Bhavani, 9 m. A branch of the S. Indian Railway runs to (88 m.) Trichinopoly junction (Route 36, p. 667).

On this branch at 19 m. Unjalur station is a very pretty village, with fine trees and a long coconut avenue. Close to the station, in an enclosure, several huge terra-cotta figures of horses and other animals can be seen from the train; similar figures may be

seen at many places in the Madras Presidency.

40 m. **Karur station.** Hdqrs. of a Sub-Collector and a Municipal town. This was the capital of the ancient kingdom of Chera. The fort was constantly besieged both in ancient times and during the wars with Tipu Sultan. In 1801 it was abandoned as a military station. The ruins of the fort and old temple are both interesting.

45 m. from Karur, and 85 m. from Erode is **Trichinopoly Fort**, 3 m. from the terminus of the branch at Trichinopoly Junction.

302 m. from Madras, **Podanur junction station (R.)**. Coimbatore District Board line to Pollachi, 25 m., for Anamalai Hills, 8 m. distant. From Pollachi the line has been extended to 75 m., Dindigal (p. 672, Route 36). Motorable road from Pollachi *via* Damalpet (17 m.) to (71 m.) *Munnar*, 6000 ft. above sea-level, the centre of the **High Range** district of the Travancore hills. Good club and comfortable travellers' bungalow, where meals can be obtained. Tea estates are scattered through the district; and there are many opportunities for sport.

Podanur to Coimbatore and the Nilgiris

From Podanur the line for Mettupalaiyam and the hill railway to the Nilgiris turns N., and passes to

306 m. **Coimbatore station**, 1398 ft. above sea-level (pop. 65,788, D.B.). Motor-cars can be hired. There is a large central jail 1 m. N.E. of the railway station. All Souls' Church is $\frac{1}{4}$ m. to the E., and the Club is near it. The Agricultural College and farm, the Forest College and Forest Museum are 2 m. distant. The great sight of Coimbatore, 3 m.

distant, is the **Temple of Perur**. A view of a pillar in it is given at p. 399, vol. 1 of the *Hist. of Indian Architecture*. Fergusson says: "The date of the porch at Perur is ascertained within narrow limits by the figure of a Sepoy loading a musket being carved on the base of one of its pillars, and his costume and the shape of his arm are exactly those we find in contemporary pictures of the wars of Aurangzeb or the early Mahrattas in the beginning of the 18th century. (The inscriptions copied at Perur refer themselves to the 12th century and later.) The bracket shafts are attached to the piers, as in Tirumal Nayak's buildings, and, though the general character of the architecture is the same, there is a coarseness in the details, and a marked inferiority in the figure sculpture, that betray the distance of date between these two examples." In front of the temple, which is a small one, there is a **Dwaja Stambha**, or stone flag-staff, 35 ft. high. The central shrine of the temple is dedicated to Goshthisvara. The shrine of Sabhapati, a name of Siva, occupies only a subsidiary position. There is a smaller temple to Patteswar. They were both built in Tirumal's time. There is only one gopuram, with five storeys, about 55 ft. high. In the corridor leading to the vimana there are eight very richly-carved pillars on either side in the front row, and behind them eight smaller and plainer. From the ceiling hang several chains, perhaps an imitation of the chains with bells which hang from the Dwaja Stambha in front of the building. The pillars represent Siva dancing the Tandava; Siva killing Gajasur, the elephant-headed demon, appropriate enough in a locality where wild elephants used to do such mischief; Vira Bhadra slaying his foes; and the Sinha, or lion of the S. Siva is represented as treading on the

head of the elephant - demon, whose skin is seen.

328 m. **Mettupalaiyam station** (R.). From here the metre-gauge Nilgiri Railway ascends 4000 ft. to (17 m.) Coonor, and to Ootacamund, 12 m. farther on. The Nilgiri mail train which leaves Madras in the evening, arrives on the following morning, and Ootacamund is reached in 3½ hrs. On the mountain gradient the ry. is furnished with a central rack rail, enabling it to ascend one in twelve. The scenery is fine, though not so fine as on the Darjeeling Railway. Care must be taken to guard against the drop in temperature of 20 to 30 degrees. For the road journey from Mettupalaiyam to Ootacamund (32 m.), see Chap. IX. of *Topee and Turban*, by Lt.-Col. Newell (John Lane, 1921).

Coonor * is 6100 ft. above sea-level. The climate is about 6° warmer than that of Ootacamund, the mean annual temperature being 65°, and the rainfall 55 in.

In Coonor itself there is not much to see, but there are pretty walks round the place, which will occupy the spare time of two days. A Pasteur Institute for S. India has been established here. The mildness of the climate has made Coonor a favourite resort for persons of delicate health. There are several hotels and boarding-houses; good tennis courts at the Wellington Gymkhana race-course, an excellent golf-links within an easy walk through Sim's Park. Lady Canning visited Coonor in April 1858, and was enchanted with the place, comparing the view over the plains with that over the Mediterranean from the Corniche.¹

Sim's Park, a prettily-laid-out public garden, contains an excellent collection of plants. One

¹ See *Two Noble Lives*, by A. J. C. Hare (George Allen, 1893).

shady dell is full of splendid tree-ferns and other ferns of large size, and is overshadowed by large trees of scarlet rhododendron. Below the park is the *Wellington Race-course*. A ride of 4 m. as the crow flies, but of 7 m. following the windings of the path, brings the traveller opposite to the *St Catherine's Waterfall*, which is situated N.E. of Coonor. The road leads for 3 m. along the skirts of pretty woods, or *sholas*, as they are here called, and then, turning off into a valley, reaches (4 m.) a rocky bluff called *Lady Canning's Seat*. Below, to the S. and E., lie extensive coffee plantations. The path then descends considerably, and turns S.E. to a high bluff with a path all round it, overlooking the chasm into which the stream that makes the *St Catherine's Fall* takes a leap of 250 ft. into a very deep ravine. On the other side—i.e., S.W.—of Coonor, at about the same distance therefrom, there is another waterfall near Kartairi, which has been harnessed to supply electric power for the Government Cordite Factory at Aruvankadu, near Wellington—a huge enclosure with a high wall running round it for several miles.

An *Excursion* may be made to the **Hulikal Drug**, or Tiger-rock Fort, which is on the summit of a hill that towers up to the left of the pass in ascending from Mettupalaiyam. It requires a whole day from dawn to sunset, and is rather fatiguing. The road to it turns off at the first zigzag on the new ghat about 2 m. from Coonor. A rough bridle-path along the ridge leads to it. The peak is about 6294 ft. high, and commands in clear weather a splendid view.

From the Post Office at Coonor it is about 3 m. to the barracks at Wellington. About ½ m. before reaching the barracks a very

pretty fountain at a cross-road is reached, and the road to the barracks turns off sharply to the left. The buildings, an unsightly pile nearly 900 ft. long, but believed to be among the finest in India, lie half-way up a very steep hill, on which is the Commandant's house, with a pretty garden. The barracks were built in 1860, and were added to in 1875. The water supply is brought from the Rallia Plantations, 3 m. away. A large piece of ground close to the barracks is cultivated by the soldiers, where both flowers and vegetables are very successfully grown. The mean annual range of the thermometer is 64° , and of the barometer 24° . The rainfall is about 70 in.

Motor-bus service, 13 m. from Coonoor to Kotagiri (p. 645).

Ootacamund * the summer headquarters of the Government of Madras (lat. $11^{\circ} 24'$, long. $76^{\circ} 44'$). From Wellington to Ootacamund is 9 m. The old road is well planted with trees; in parts it skirts a precipice of some hundred feet in height.

The first Europeans to penetrate to Ootacamund were probably the surveyors, Keys and MacMahon, in 1812: Whish and Kindersley, members of the Madras Civil Service, followed in 1818: John Sullivan, another civilian, came up in 1813; and in 1821 Europeans began to settle on the hill-top. Sir T. Munro visited the Nilgiris in 1826: and Lord William Bentinck spent several months at Ootacamund in 1834.¹

Ootacamund (*mund* = "village of huts") is surrounded by lofty hills. Of these Dodabetta on the E. is the highest, being 8640 ft. above sea-level; but there are also other lofty hills, as Elk Hill, 8090 ft. high. The Lake, which was made in 1823-25, is about 2 m. long from E. to W., but narrow. It

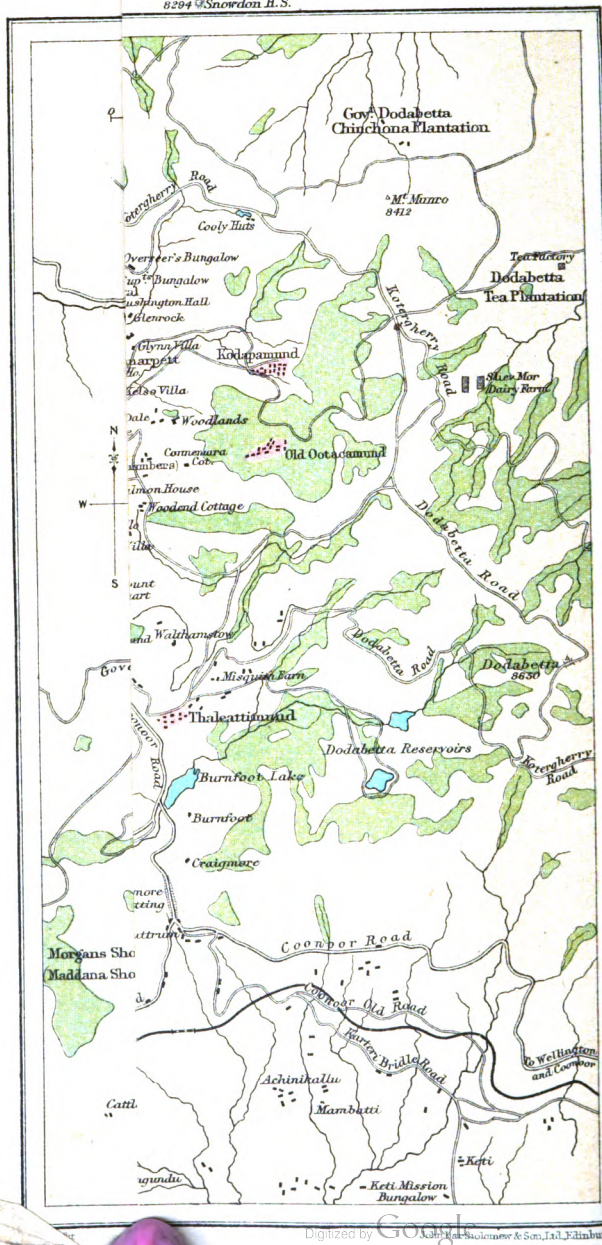
is 7220 ft. above sea-level, and the road round it is one of the pleasantest drives in the place. The principal Church, *St Stephen's* (consecrated in 1830), is near the Club, the Post Office, the Public Library, and the principal shops. The market is close to the E. end of the lake, and the Jail is to its W. on the N. side. *St Thomas's Church* (consecrated 1870) is on the S. side of the lake, and close to it W. of the Willowbund. The railway crosses the lake immediately to the W. of the bund, and the station lies N. of the lake, between Lake Road and Hadfield Road.

The *Botanical Gardens*, through which Government House (a modern residence, begun in 1877, and completed several years later) is approached, were established in 1840 by public subscription, and are beautifully laid out in broad terraces one above another at the foot of a hill, which gradually rises till it culminates in the peak of Dodabetta, 1206 ft. above the gardens and 8640 ft. above the sea. The Superintendent's house is charmingly situated.

Ootacamund is a centre for a beneficent Govt. industry, the manufacture of quinine from the bark of *Cinchona*, a tree introduced from South America in 1862. Nearly 15 tons of quinine are distributed yearly to dispensaries throughout India. The original plantation lies 3 m. N.E. from *St Stephen's Church*. New plantations have been opened at Naduvattam, 20 m. N.W., where the Govt. quinine factory is situated.

From the top of the ridge a most superb panorama is seen. To the S.E. is Elk Hill, behind which and not visible, is the *Lawrence Memorial School*, 7330 ft. Farther to the S. of the lake is *Chinna Dodabetta*, or Little Dodabetta, 7849 ft., and in the far W. *Cairn Hill*, 7583 ft., Ootacamund itself and its lake, and

¹ Consult *Ootacamund*, by Sir Frederick Price (Madras, 1908).



St Stephen's Church Hill, 7429 ft. Beyond, to the N. of the lake, are still higher hills, as *Snowdon*, 8299 ft., and *Club Hill*, 8030 ft. The finest view, however, is to the E. Here is *Orange Valley*, where oranges once used to grow. To the N. is the Moyar Valley, ignobly termed the "Mysore Ditch," but really profound and gloomy with forests and the shadows of overhanging hills. To the E. are seen dimly the Gajalhatti Pass and N. Coimbatore mountains, covered with dense forests abounding with game.

The *Lawrence Memorial School* at Lovedale, 4 m. from the Post Office at Ootacamund, was adopted by Govt. in 1859, in accordance with the will of Sir Henry Lawrence. There are 500 boarder pupils, who are the sons and daughters of officers or soldiers of the British Army in India, preference being given to those who have lost one or both parents.

The St George's Homes at Kaity (Keti), 5 m. from Ootacamund, accommodate about 120 orphan and destitute children of European descent.

The house occupied by the *Club* was built in 1831-32 at a cost of between £12,000 and £15,000 by Sir William Rumbold, Bart., the Hyderabad banker. It was at first used as a hotel and, in 1834 it was rented by Lord William Bentinck, the Governor-General, who received Macaulay here. The Government Secretariat on Stonehouse Hill occupies the site of the first house built at Ootacamund (in 1822-23, by Mr John Sullivan).

In many of the compounds or grounds at Ooty are beautiful shrubs. *Heliotrope* has been known to grow to 10 ft. in height and 30 ft. in circumference, and a *verbena* to 20 ft. in extent.

N.W. of the lake are the downs, with the golf-links. The downs, which consist of grassy slopes and dales, with woods (*sholas*) and

streams interspersed, are the scene of the well-known hunting attractions of Ootacamund. They are known as the Wenlock Downs (after Lord Wenlock, formerly Governor of Madras), and cover an area of 30 sq. m. Their presence and the absence of alpine foliage give Ootacamund a very different appearance from the N. hill stations of India. Recently trout fishing has been started in the more important streams and rivers on the plateau, and some good sport has been obtained.

The *Murkurti Peak* (or *Taiganam*) is 16 m. due W. of Ootacamund, among the grand mountains of the Kundas, where the scenery is magnificent. $5\frac{1}{2}$ m. can be driven; the remaining $10\frac{1}{2}$ m. must be done on horseback. Refreshments must be taken. This peak is 8380 ft. high, while *Avalanche Hill* is 8497 ft., and *Kunda Peak* 8304 ft. "It is a spot held sacred by the Todas as the residence of a personage whom they believe to be the keeper of the gates of heaven." The religion of this singular tribe has not yet been definitely ascertained. The road to the peak passes along the ridges of the Governor Shola range of hills, crosses the Parsons Valley and Krurmund streams, and for some distance follows the windings of the Murkurti stream, which is the head of the Paikara River. From the head of the Paikara an easy ascent of $1\frac{1}{2}$ m. leads to the summit of the peak; and there, should the mist and clouds fortunately roll away, a grand scene will present itself to the view. Towards the S. the N. termination of the Kunda range can be seen rising in abrupt escarpments and vertical precipices to an enormous height, excavated and furrowed by deep ravines, while the N. side of the mountain is a terrific and perfectly perpendicular precipice of

at least 1500 ft. The mountain here seems to have been cut sheer through the centre, leaving not the slightest shelf or ledge between the pinnacle and the level of the plains below. On the W. side the picturesque paddy flats of the Wynaad, which appear amidst dense jungle, and the plains of Malabar as far as the Arabian Sea are seen in vivid contrast to the blue mountain ranges of Ootacamund and the heights of Dodabetta that present themselves to the view on the E.

Other sights on the Nilgiris are the *Waterfalls at Kal-Hatti* and the *Paikara Falls* at the N.W. corner of the plateau. There is also another much finer fall in the heart of the Kundas, formed by the Bhawani, 400 ft. or 500 ft. high, and surrounded by scenery of the most savage grandeur; but it is difficult of access. The *Ranga Swami Peak* may also be visited. The native villages of the Todas (the aboriginal hill tribe) and other tribes may be seen in these expeditions. (See *The Todas*, by W. H. R. Rivers. Macmillan, 1906).

Stone circles, which the Todas call *Phins*, and which contain images, urns, relics, and some very prettily-wrought gold ornaments, are found in many parts of the hills; but the most convenient locality for a visit from Ootacamund is the Hill of Karoni, 3 m. to the S. The circles are built of rough unhewn stones, some of them of large size, which must have been brought from a considerable distance. The history of their construction is unknown.

The tea industry flourishes on the Nilgiris. There were 129 gardens in 1926, with an area of 22,000 acres under cultivation, and an out-turn of about 9 million lb. of manufactured tea.

Sport on the Nilgiris is varied and interesting. Along the jungle-clad slopes of the plateau and

in the extensive forests on the Wynaad plateau roam herds of elephant and bison, which in old times used to mount to the Kunda plateau. Tigers, although not plentiful compared to other parts of India, are shot to the number of twenty or thirty every year, and those that have lived on the plateau for any length of time exhibit magnificent furry coats.

Panthers are numerous, and the black variety, so rare in most parts of India, is less uncommon here. Owing to the exertions of the Nilgiri Game Association, which was founded in 1877, the game is now strictly preserved.

The Nilgiri "ibex," an unique genus of the goat tribe, whose habitat is confined to the Madras Presidency, is found along the precipitous sides of the plateau. Owing to the extreme wariness of the ibex and to the dangerous nature of the ground, the sport of ibex-stalking is one of the finest in the world, calling for a steady nerve and the instinct of a sportsman. On the plateau, too, occurs the little barking deer or Muntjac, locally known as the "jungle sheep," although less common than formerly.

The chital, or spotted deer, the most beautiful of all the deer family, frequents the lower slopes of the plateau and the valleys of the Moyar and the Bhavani rivers, and here, too, are found the mouse-deer and the four-horned antelope.

To complete the list of large game in the Nilgiris may be added the sloth bear, the hyena, and the wild boar, the last of which is a sad enemy to the potato crops of the peasantry.

The brown monkey and the grey langur may be seen on the Mysore road below the Gudalur Ghat, and the black Nilgiri monkey in the wilder parts of the hills.

For the possessor of a shot-gun there is also a considerable variety of sport. From September to

March snipe may be found, and although no bags comparable with those obtained on the plains of India are to be got, smaller bags are compensated for by the pleasure of being able to use spaniels and other English sporting dogs to put up the birds before the gun. The woodcock, the solitary, and the wood-snipe are all found during this time of the year, and by those who know their habits a good deal of sport can be obtained. The only indigenous game-bird of importance on the plateau is the "jungle cock," whose cheerful crowing at sunrise and sunset adds so much pleasure to life in the forest. They are carefully protected and encouraged by the Game Association, which has also been at considerable trouble to introduce other sporting birds.

Below the plateau the peacock is very common, and there are several varieties of quail, the common brown partridge, the spur-fowl, and pigeons of various kinds, two of which, the Nilgiri wood-pigeon and the Imperial pigeon, are also found on the plateau itself.

For the fisherman the Nilgiris have also special attractions. The Moyar and the Bhavani and their tributaries are the home of the mighty mahsir and the Carnatic carp. The rivers are under strict conservancy. On the plateau many miles of beautiful hill streams have been stocked with trout, and sport equal to the best that English streams afford can be obtained with a very moderate expenditure of money and trouble. Last, but not least, comes Mr Jorrock's "Sport of Kings." Ootacamund is celebrated throughout the East for its hunting. The Ooty Hunt has a history dating from 1847, unbroken except during the Mutiny, and boasts of a pack of from 50 to 60 couple of foxhounds, partly

imported year by year from England, and partly bred and reared on the hills, together with excellent kennels and a large staff. The hunting season lasts from April to the end of October. There are no foxes, but the hill jackal is no mean substitute, and is a very different-looking animal from his brother on the plains. A really good horse and stout nerve are required to see the finish of a run with the Ooty hounds.

Kotagiri, the oldest and third largest hill station on the Nilgiri Hills, is 13 m. from Coonoor and 18 m. from Ootacamund. A motor-bus service runs from Coonoor ry. station in connection with the up and down mail trains; the journey takes 1 hr. Kotagiri is an ideal sanatorium, and is much liked as a rest-cure resort. It is 6511 ft. above sea-level, has some good scenery, and commands a wide landscape all round. There is a hotel and a small club; also a golf-links of nine holes. Magnificent views on the road to Ootacamund and also on the road to Kodanad, 6 m. N. by E. The temperature of Kotagiri is half-way between that of Coonoor and Ootacamund; the average for the year may be put at 62 degrees. The rainfall is approximately the same. Lord Dalhousie spent three months in the autumn of 1855 at Kota Hall, the oldest house in Kotagiri, in a beautiful situation looking down on the ghat. Lady Canning also stayed there in 1858 during her visit to Coonoor. 1 m. W. of Kotagiri is the hamlet of *Dimhatti*, where the first English bungalow was built in 1821.

Podanur Junction to Cochin.

From Podanur (p. 640) the railway to the W. coast runs through the gap in the ghats, 20 m. broad, known as the **Pal Ghat** gap, the only real break in the 600 m. of the

W. Ghats. All this portion of the line is very picturesque; it runs through dense forest, with fine views of the bare mountain-side close at hand on the N. The mountains on the S. side of the pass are only visible here and there in the distance.

Connection with Dindigal (p. 672) is made by a metre-gauge line running through **Palni** (Route 36).

333 m. Olavakkot junction, from which there is a short line (3 m.) to Pal Ghat; (D.B.), the second town of the District. The fort, built by Hyder 'Ali in 1766, was captured in 1784, and again in 1790. The glacis, moat and walls are in good preservation, and the situation is very fine. Golf-course.

360 m. Shoranur junction (R.). Across the Ponnani River is a D.B. A broad-gauge line runs N. (24 m.) to **Nilambur** through the Moplah country; Nilambur is famous for its teak forests. S. of Shoranur the Cochin State Railway crosses the Ponnani River and enters Cochin State, running (20 m.) to Trichur and (65 m.) to Ernakulam. **Alwaye** (54 m.), where the railway crosses the Periyar R., is a favourite health resort in March, April and May on account of the excellent bathing. At **Trichur** (pop. 27,900; D.B.) there are an ancient, interesting temple, which was quite possibly a Buddhist shrine in the first instance, a Museum, and a Zoological Garden. The old British Residency is now used as a Palace. Between Trichur and Cochin is a most picturesque backwater.

Ernakulam is the capital of Cochin State. The present (1929) Maharaja, His Highness Raja Sir Sri Rama Varma, G.C.I.E., succeeded in 1914. The area of the State is 1417 sq. m., with a pop. of 479,019, and an annual revenue of 72 lakhs. Less than a mile away across the lagoon is Bolghotty

island, on which is the British Residency, built by the Dutch in 1744, with a beautiful garden. Three m. across the lagoon, at the N. end of a long, sandy spit, is the town of **British Cochin** (D.B.), Kuchi Bandar (pop. 20,637). The S. end, which is Cochin State territory, is known as Muttancheri. Vypin island lies between Cranganore on the N. and Cochin town on the S. Steamers anchor $1\frac{1}{2}$ m. from the shore, as the shallow water on the bar only allows country sailing craft to use the inner harbour. The value of the trade in 1926-27 was 9'94 lakhs. The town runs along the Western shore of the spit facing the lagoon; at the N.W. end are a grassy open space, round which the houses of the Europeans are built, and the remains of the old Portuguese fort of St Emanuel. The oldest tombstone in S. India, bearing an inscription in Portuguese and the date, 1524, is in the compound of the Post Office in Parade Road. The long main street is picturesque; at the S. end of it in Mattancheri is the Jews' quarter, with two synagogues. That of the white Jews, which is the larger and finer, is floored with Chinese 18th-century tiles. The Jews are divided into two sections, —the Black, who claim to have settled on this coast in the 3rd and 4th century A.D., and the White, who are believed to have arrived here at a much later date. Black Jews possess a copper grant from the Brahman Prince of Malabar, which is dated 388 A.D., or, according to Buchanan-Hamilton, 490 A.D. The oldest tombstone in the *Beth-haim* ("House of Life"), or Jewish cemetery, at the back of the Jews' quarter, is dated 1666. The old Mattancheri Palace containing some admirable frescoes dates back to Portuguese times. The Maharaja usually resides at the Hill Palace at Tripunithura, 5 m. from Ernakulam. **Elephantiasis** (alternatively known as

"Cochin leg") is unhappily common in Cochin.

Cochin is of special interest as the earliest European settlement in India. In 1500 the Portuguese adventurer Cabral, after having cannonaded Calicut, landed at Cochin and met with a friendly reception from the Raja, a reluctant vassal of the Zamorin of Calicut. Cabral returned to Portugal with a cargo of pepper and was followed by Juan da Nova Castelo. In 1502 Vasco da Gama, on his second voyage, came to Cochin, and established a factory. In 1503 Albuquerque, the Portuguese admiral, arrived just in time to succour the Cochin Raja, who was besieged by the Zamorin in the island of Vypin. He built the Cochinfort, called "Mannel Kolati," or Fort St Emanuel, the first European fort in India, just five years after da Gama had arrived on the Malabar Coast. The Franciscan friars, who accompanied him, erected a small modern chapel, on the site of which the Church of St Francis now stands. Albuquerque returned to Portugal, leaving Cochin guarded by only a few hundred men under Duarte Pacheco, when the Zamorin, with a large host, invaded the country by land and sea. Pacheco, with his brave band of 400 men, firmly resisted all the attacks of the Zamorin, and at last forced him to retreat to Calicut. In 1505 Francisco Almeyda, the first Portuguese Viceroy of India, came to Cochin with a large fleet, and was in 1510 succeeded by Albuquerque. On Christmas Day 1524 da Gama died here, and was buried in the principal chapel of the Franciscan monastery, then dedicated to St Anthony, and now the English Church. His body was afterwards (1538) removed to Portugal, and rests in the Belem Church at Lisbon. In 1530 St Francis Xavier, the apostle of the Indies, preached in these parts and made

many converts. In 1557 the Church of Santa Cruz was consecrated as the cathedral of a Bishop. In 1577 the Society of Jesus published at Cochin the first book printed in India. In 1585 Cochin appears to have been visited by the English traveller Ralph Fitch, with his band of adventurers. In 1616 the English, under Keeling, engaged to assist the Zamorin in attacking Cochin, on an understanding that an English factory was to be established there, which, however, was not founded until 1635. In 1663 the town and fort were captured from the Portuguese by the Dutch, and the English retired to Ponnani. The Dutch greatly improved the place and its trade, building substantial houses after the European fashion, and erecting quays. The Franciscan Church, which still survives, with interesting Portuguese and Dutch monuments, was converted into a Protestant place of worship, and the cathedral was turned into a warehouse. In 1776, the State of Cochin was subjugated by Hyder 'Ali, to whom and to his successor Tipu Sultan it remained tributary till 1791, when by treaty with the E.I. Co. protection from invasion was secured for an annual subsidy. In 1796 Cochin town was taken by the British under Major Petrie from the Dutch, and in 1806 the cathedral was blown up, for strategic reasons.

The Malabar Backwaters.¹—The network of lagoons and canals which form so remarkable a feature of this part of India, are well worth exploration. The entire journey from Ernakulam to Quilon (p. 679) can be made by water through diversified and beautiful scenery. The S. Indian Railway issue special tickets for the following circular tour: Madras to Ernakulam by rail *viâ* Shoranur;

¹ See the fourth chapter in *A Wanderer's Log*, by C. E. Bechhofer (Mills & Boon, 1922).

from Ernakulam to Quilon by backwater (80-90 m.) in a reserved portion of one of the steamers or by private motor-launch; the journey may be broken at **Alleppey**, where there is a comfortable and well-furnished travellers' bungalow; from Quilon by rail (38 m.) to Trivandrum (p. 680). The return journey to Madras is made by rail *via* Shencottah, Tinnevely and Madura (Route 36) over the Southern Ghats. **Alleppey** is the chief port of Travancore. The town is built on either side of the main waterway, with occasional bridges over wide canals.

Christians in Malabar. In both Cochin and the neighbouring State of Travancore about 25 per cent. of the population are Christians, locally known as *Nazaráni* (*i.e.*, Nazarenes). Local tradition ascribes the first conversions to the Apostle Thomas; but, whatever doubts surround the historical origin of this Church, it may be accepted without question that after the condemnation of the Nestorian heresy by the Council of Ephesus in 431 A.D. colonisation by parties of Syrian refugees and extensive conversions among high-caste Hindus took place on the Malabar Coast. When the Portuguese landed at Cochin in 1503, they found a flourishing Christian community, chiefly Nestorian, and governed either by bishops sent by one or other of the Eastern patriarchs or under Metrans (Metropolitans) of their own. Their prosperity and influence is a striking tribute to the tolerance of the Hindu rulers of the two principalities which continues to the present day. For about a century the Portuguese made no attempt to interfere with the doctrines or ritual of the co-religionists so unexpectedly found on the Malabar Coast; but, after the Inquisition had been set up at Goa, a campaign of proselytisation began, accompanied by strenuous

and in the main successful efforts to cut off the Syrian Christians from communication with the Patriarchs by interception of their correspondence and by seizure and imprisonment of several Bishops on their way from Asia Minor to take charge of Malabar sees.

The first fissure in the Christian Church in Malabar dates from 1663. Mar Gregory the Bishop, who was sent by the Patriarch of Antioch in 1665, being a Jacobite, the majority henceforward became known as the Jacobite Syrians, while the minority who adhered to the Church of Rome, are called Romo-Syrians. In 1663 the Dutch captured Cochin and an era of tolerance followed, but internal dissensions and disputes in the matter of doctrine and liturgy continued. Of Roman Catholics there are those who use the Latin rite under the Archbishop of Verapoly (Cochin) and the Bishop of Quilon, chiefly recent converts from the lower castes, and a large community who follow the Syrian rite under Indian Vicars-Apostolic, owing allegiance to and appointed by the Pope of Rome. Then there is the so-called Nestorian Church under a Bishop from Mardin appointed by the Patriarch of Nineveh and the Mar Thoma Christians under Metrans appointed by the Patriarch of Antioch, who are Romish in doctrinal beliefs but do not acknowledge the Papal supremacy. There are also Reformed and Jacobite Churches under locally appointed Metropolitans; and among the Protestants two flourishing communities directed by the Church and London Missionary Societies.

Kottayam (D.B.), 45 m. S.E. of Ernakulam, is the chief Christian centre in Travancore and the headquarters of the Bishop in Travancore and Cochin, who is also the head of the C.M.S. Mission in the two States. The C.M.S.

has been working in this field since 1817.

Periyar is S.E. of Cochin about 120 m. *viâ* Kottayam, and about 70 m. S. of Kodaikanal (p. 672, Route 36). The dam of the Periyar River irrigation scheme is 1200 ft. by 1550 ft. By this dam the river, which flowed to the Indian Ocean, has been turned so as to flow into the Bay of Bengal, irrigating the country on its way. The lake is 6560 acres and 8000 acres at different levels. Water is taken out through a tunnel of average section 12 ft. by 9 ft. and length 5940 ft. The discharge irrigates 150,000 acres. This great work was carried out under the control of Colonel Pennycuik, R.E., C.S.I.

Main Line to Calicut and Mangalore.

The main line proceeds from Shoranur Junction to

388 m. from Madras, **Tirur** (D.B.). Roads for Ponnani and Malappuram meet here. The famous Malabar backwater system of communication comes in contact with the railway here (see p. 647). Motor-boats ply, in connection with the trains, to

Ponnani; the hdqrs. of the Moplahs (Mappillas), a fanatical Muhammadan sect peculiar to the W. coast; and the place of residence of the Makhdum Tangal, their spiritual head. The religious college over which he presides is attended by *Mullas* from all parts of Malabar. His office is hereditary in the female line, in conformity with the custom among Malabar Hindus. Malappuram, 14 m. from Tirur, is the centre of the country in which there have been so many outbreaks of the Moplahs, the latest being in 1921. A detachment of British infantry is stationed here.

393 m. **Tanur** (D.B.). The Government Fisheries Department has a fish-curing and canning factory here. A fine mosque. Visited by St Francis Xavier, 1546.

404 m. **Kadalundi**. Station for Beypore, a small port, 8 m. S. of Calicut.

413 m. **Calicut station** * (good D.B., also a hotel and club). Anchorage 2 m. from shore. Boats, Rs. 2½ each. Golf-course. Motor-bus services to Manjeri (30 m.) and to Puthuppadi (24 m.). The latter place is on the road from Calicut to (131 m.) Mysore City (p. 607) which passes through the Wynaad (see p. 651); practicable for motors. Buchanan-Hamilton¹ says: "The proper name of this place is Colicudu. When Cheruman Perumal had divided Malabar among his nobles, and had no principality remaining to bestow on the ancestors of the Tamuri, he gave that chief his sword, with all the territory in which a cock crowing at a small temple here could be heard. This formed the original dominions of the Tamuri, and was called Colicudu, or the Cock-crowing." Others have held that the name of the place is Kallikot, the fort on the Kallayi river. The term Tamuri used by Buchanan-Hamilton is a corruption of *Samutiri*, or sea-lord, and has been still further transformed into Zamorin. It is still the title of the Raja of Calicut. To the S. of the town is the Moplah quarter, with a number of mosques. To the N. at West Hill railway station, 3 m. from Calicut railway station, there are barracks for a detachment of British troops. To the centre is the Eurasian quarter, with a R.C. Church and a large tank, and an English Church, the Collector's Cutcherry and the Judge's Court, and near this are the remains of the

¹ *Journey through Mysore, Canara and Malabar* (1807), vol. 2, p. 474.

old palace and a new palace. The old burial-ground is close to the pier. Here is interred Henry Valentine Conolly, Collector and Magistrate of Malabar, who was murdered by Moplahs in September 1855. The oldest inscription that can now be read is to Richard Harrison, who died on 14th April 1717. Facing the sea are houses of the European residents, and the Custom House, and also the Club. The Collector's house is at East Hill, near the barracks of West Hill. There is a large and interesting temple in Talli, the Brahman quarter. There is a great appearance of cleanliness and comfort in the houses even of the very poor in Calicut, and the whole place is rendered very picturesque by the fine trees and groves of cocoanut palms in which it is embowered. The French have still a *loge* at Calicut. Cotton cloth, originally imported from this town, derives from it its name of *calico*. The Basel Mission has a large textile factory in Calicut, as well as a college and a hospital.

At Calicut, on 11th May 1498, arrived Vasco da Gama, after a voyage of ten months and two days from Lisbon, of which the "Os Lusíades" of Camoens contain so interesting an account. Calicut and the adjoining West Coast were, at that time, under the suzerainty of Vijayanagar (p. 585); and the town contained many noble buildings, especially a Brahman temple. In 1509 the Marechal of Portugal, Don Fernando Coutinho, made an attack on Calicut with 3000 men, but was himself slain and his forces repulsed with great loss. In 1510 Albuquerque landed, burnt the town, and plundered the palace, but was eventually obliged to sail away with great loss. In 1513 the Zamorin made peace with the Portuguese, and permitted them to build a fortified factory. In 1616 an English factory was established at Calicut.

In 1695 Captain Kidd the pirate ravaged the port. In 1766 Hyder 'Ali invaded the country, and the Zamorin, finding that offers of submission would be in vain, barricaded himself in his palace, and, setting fire to it, perished in the flames. Hyder 'Ali was soon called off to the war in Arcot, and the territory of the Raja of Calicut revolted, but was reconquered in 1773 by Mysore. In 1782 the victors were expelled by the English, but in 1789 Tipu Sultan overran the country, and laid it waste with fire and sword. Many women were hanged with their infants round their necks; others were trampled under the feet of elephants. The cocoanut and sandal trees were cut down, and the plantations of pepper were torn up by the roots. The town was almost entirely demolished, and the materials carried 6 m. to the S.E., to build a fort and town called *Farrukhabad*, "Fortunate City." The next year Tipu Sultan's general was totally defeated and taken prisoner with 900 of his men by the British, who captured the so-called "Fortunate City"; and in 1792 the whole territory was ceded to the English Government. The Zamorin now enjoys a political pension and has vast private estates, but no territorial jurisdiction. It is said that two pillars of the old palace in which da Gama was received still remain. It is related that the Portuguese leader knelt down on his way to some Hindu idols, taking them for distorted images of Catholic saints, "Perhaps they may be devils," said one of the sailors. "No matter," said da Gama, "I kneel before them and worship the true God."

450 m. **Mahé** (pop. 11,317; named after M. Mahé de Labourdonnais when he captured it in 1725—originally called Mayyazhi) is a dependent territory of 2½ sq. m., belonging to the French

—their only possession on the W. coast, under a Chef de Service subordinate to Pondicherry.

It is finely situated on high ground overlooking the river, the entrance of which is closed by rocks. None but small craft can pass the bar in safety, and that only in fair weather; but the river is navigable for boats to a considerable distance inland. On a high hill some way off is seen the Mission House of the Basel missionaries at Chombala. From this hill there is a beautiful view of the wooded mountains of *Wynaad*. The French settlement at Mahé dates from 1725. It was taken by the English under Major Hector Munro in 1761. The Peace of Paris, in 1763, gave it back to the French, but it was retaken by the English in 1779, and in 1793 the British establishment at Tellicherry moved to Mahé; but, the place being restored to the French in 1817, the English officials returned to Tellicherry. Mahé, in common with the other French settlements in India, possesses all the institutions of a republic—manhood suffrage, vote by ballot, municipal and local councils, representation at the *Conseil Général*, which sits at Pondicherry, and in the Chambers in France by a senator and a deputy, who in practice are always residents in France. The *Administrateur* is appointed from home. He represents the central, and the *Maire* the local, Government (see p. 658). Excellent fishing.

456 m. **Tellicherry** (D.B. good). Anchorage, $1\frac{1}{2}$ m. from shore. Boat hire, R.1 per boat. Motor service to Iritti, 32 m. The town lies in a most picturesque situation, backed by wooded hills, interspersed with valleys and watered by a fine river. There is a reef of rocks which forms a natural breakwater, within which is sufficient depth of water for a ship of 600 tons to ride at anchor.

In 1781 H.M. ship *Superb*, of seventy-four guns, was lost here. The fort is built on a rising ground close to the sea, and is about 40 ft. above its level. The whole of the N.W. side of the citadel is occupied by an old lofty building. The town contains good examples of the better Moplah houses. The main bazar street is one of the most fascinating in Malabar, and the coast scenery is delightful: good bathing and an excellent club.

The English factory at Tellicherry, which was established chiefly for the purchase of pepper and cardamoms, was first opened in 1683, under orders from the Presidency of Surat. It was the first regular English factory on the Malabar coast. In 1708 the East India Company obtained from the Cherikal Raja a grant of the fort. In 1782 Hyder 'Ali attacked the place, but was compelled by the vigorous sally of the garrison, under Major Abington, to raise the siege.

The *Cardamoms and Coffee of the Wynaad* are mostly exported from Tellicherry; the first are reckoned the best in the world. The seed ripens in September; excellent sandal-wood is also exported. The *Wynaad* is a plateau about 3000 ft. above sea-level in the E. of the Malabar District containing many tea and coffee estates. Coffee predominated till the end of the 19th century, but there is now far more tea. There were 40 tea gardens in 1926, employing a labour force of about 11,000 persons and producing 5 million lb. of manufactured tea. There are two main roads leading into the Wynaad; both are practicable for motors. The Calicut-Mysore road (p. 649) passes through the planting centres of (38 m.) **Vayittiri** (small R.H., Club) and (65 m.) **Manantoddy** (2558 ft. above sea-level; D.B.). About 2 m. from Manantoddy on

the banks of the river is the *Vallurkavu*, or Fish Pagoda, dedicated to the goddess Durga. The carp are sacred, and merit is acquired by feeding them. At Kalpatta (6 m. from Vayittiri) a branch road (motorable) runs through (14 m.) Sultan's Battery (Ganapathivattam) to (48 m.) Gundlupet in the Mysore State, and thence (36 m.) to Mysore City. The other road runs from Tellicherry to (48 m.) Manantoddy. **Sultan's Battery** is so-called from a fort built by Tipu Sultan on the site of the police station. 4 m. E. of Sultan's Battery is a natural fissure in the rock; the walls are covered with crude drawings and there are four inscriptions (see *Indian Antiquary*, vol. 30.).

469 m. Cannanore is a municipality and military station (D.B. good, and good hotel; also a Club, golf-course, and good sea-bathing). Anchorage 2 m. from shore. Boat hire, R.1 each passenger-boat. An Indian infantry regiment is stationed here. The Cantonment is on a jutting portion of land, which forms the N.W. side of the bay. Near the end of this is a promontory, on which stands Fort St Angelo, built by the Portuguese. Since its acquisition by the English, it has been improved and strengthened. The cliffs are from 30 ft. to 50 ft. high here, with piles of rocky boulders at their feet. The bungalows of the officials are most of them built on the edge of these cliffs, and enjoy a cool sea-breeze. Farther inland, and in the centre of the Cantonment, are the *Church*, magazine, and English burial-ground, contiguous to one another. The Portuguese Church, once the Portuguese factory, is close to the sea. The old Moplah town, with some picturesque mosques, the Raja's palace and narrow crooked lanes, lie round the Bay to the S. of the Fort. The climate of Cannanore is mild, equable, and re-

markably healthy. It was used as a military sanatorium during the War. The Portuguese had a fort here as early as 1505. They were expelled by the Dutch, who subsequently sold the place to a Moplah family, the head of which is called the 'Ali Raja (sea-lord), or Bibi, if a woman. His territory consisted of the town and a little of the adjacent country on the S., and he also claimed sovereignty over the Laccadive islands. These islands were sequestered for mismanagement, and were administered for over thirty years by the Collector of Malabar. Eventually in 1911 they were finally ceded, and the Raja was given a pension. In 1768 'Ali Raja, the then ruling Chief, readily submitted to Hyder 'Ali, and joined him on his invading Malabar. In the war with Tipu Sultan, in 1784, Cannanore was occupied by the English; but on the conclusion of peace next year it was restored to the Bibi. She again dallied with Tipu Sultan, and Cannanore was finally stormed and captured by General Abercromby in 1790.

550 m. Mangalore (pop. 53,877), the headquarters of the S. Kanara District, 12° 52' N., 74° 51' E. Travellers' bungalow in the town. The place is separated from the sea by a backwater formed by the junction of two streams. In the rains these rivers, which flow round two sides of a peninsula on which the town of Mangalore stands, bring down a large quantity of water, and they are then navigable for boats of some burthen to a considerable distance inland. In the dry season there is but little current in either, except that caused by the influence of the tide, which flows to about 9 m. or 10 m. from their mouth. The banks of these rivers are high and steep, and are, where the soil permits, planted with cocoanut-trees or laid out in gardens and

rice-fields. At the back of the present landing-place the great bazar commences, and stretches N. on the edge of the backwater about $\frac{1}{2}$ m. From the hill on which the old lighthouse stands a remarkable view of the coast and the ghats can be had.

In ancient times Mangalore was a place of very great commerce. Ibn Batuta, in the middle of the 14th century, mentions 4000 Muhammadan merchants as resident there. Forbes speaks of it, in 1772, as the principal seaport in the dominions of Hyder 'Ali, and well situated for commerce. Both Hyder 'Ali's and Tipu Sultan's ships of war were built at Mangalore of the fine teak produced on the slopes of the ghats. A considerable coasting trade is still carried on.

Mangalore was most gallantly defended by Colonel Campbell, of the 42nd, from 6th May 1782 to 30th January 1783, with a garrison of 1850 men, of whom 412 were British soldiers, against Tipu Sultan's whole army (see Wilks, 2, 466-86), but in the end had to surrender.

The *Swiss Mission* at Mangalore is worthy of a visit. Various industries and trades are taught—printing, book-binding, carpentry, tile manufacture, etc. There are two colleges affiliated to the Madras University—the Government College and the *Jesuit College of St Aloysius*.

As regards the products of the district, the description of Marco Polo will answer equally at the present day. He says: "There is in this kingdom a great quantity of pepper, and ginger, and cinnamon, and of nuts of India. They also manufacture very delicate and beautiful buckrams. They also bring hither cloths of silk and gold, also gold and silver, cloves and spikenard, and other fine spices for which there is a demand here." Coffee is now the chief export, the value in

1922-23 being 104 lakhs; next, areca nut, worth 35 lakhs.

There is an obelisk in the *Burial-ground* to the memory of Brigadier-General Carnac, who died here, aged eighty-four, in 1806. He commenced his military career in India with the 39th Foot (*primus in Indis*) and entered the service of the E. India Company in 1758.

There are three places containing interesting Jain buildings, viz., Mudbidri, Karkal, and Venur. At Mudbidri are remarkable Jain carvings: at Karkal and Venur are colossal images, the third—there are only three in the world—being at Sravana Belgola (p. 598) in the Mysore State. Mudbidri is 22 m. N.E. by a good road, and Karkal is 12 m. farther N.; Venur is 16 m. farther E., and not easily accessible. Motor-bus services to Karkal, Mudbidri, Udupi, Kundapur; to Bantval, Beltangadi, Puttur; to Mercara in Coorg; and to Shimoga in Mysore.

From Mangalore to Bombay by Sea.

Mangalore is the terminus of the West Coast Section of the S. Indian Railway; it is also the ultimate port of call from the middle of September until the end of May for a weekly service of steamers from and to Bombay (412 m.), maintained by the Bombay Steam Navigation Co. (Shepherd & Co.), of which Messrs Killick, Nixon & Co. (120 Frere Road, Bombay) are the managing agents; and the visitor can, if he so desires, complete his tour by a sea-voyage to Bombay (fares, first-class cabin, Rs. 32). The steamers leave Mangalore every Thursday morning and arrive at Bombay (Alexandra Dock, Ferry Wharf) on Saturday morning, calling *en route* at Mulpy, Kundapur, Bhatkal, Kumpta, Tadri, Karwar, Mormugão (Goa), and Vengurla. **Mulpy** (35 m. from Mangalore by sea) is the best natural port in S. Kanara; the roadstead is sheltered by the

island of Darya Bahadurgarh. 3 m. to S.W. are St Mary's Isles, where Vasco da Gama landed in 1498 and set up a cross. **Kundapur** (19 m. from Mulpy) is situated on the S. bank of an estuary into which three rivers flow; an ancient port which dates back to the time of the Bednur Kings (16th century). The ruined city of *Bednur* (Nagar), which is in the Mysore State, lies about 30 m. inland on a high plateau, about 4000 ft. above sea-level; it was here that the unfortunate General Mathews surrendered to Tipu Sultan in 1783. **Bhatkal** (19 m. from Kundapur) is the first port in the Bombay Presidency and lies 3 m. from the mouth of the river: there are several interesting temples; an English factory was opened here in 1637, but in 1670, a bulldog, which belonged to the chief, seized and killed a cow and the whole of the factors, ten in number, were murdered.¹ **Kumpta** (31 m. from Bhatkal) stands at the head of a small creek to S. of Tadri River; vessels anchor $\frac{1}{2}$ m. off the mouth. **Tadri** (7 m.) is a small port at the mouth of the river of that name; vessels anchor off the bar. **Karwar** (D.B., 22 m. farther N.) is the hdqrs. of the district of N. Kanara; anchorage 500 yds. from the shore. The hills come down to the water's edge. It is also accessible by road (105 m.) from Dharwar ry. stn. (p. 593). From 1638 to 1752 an English factory was established here and carried on a considerable trade in pepper. The N. fort was taken by the Portuguese in 1752, and by 1801 old Karwar was in ruins. There is a lighthouse on the Oyster Rocks off the coast, and 5 m. to the S.E. is the island of Anjediva, a Portuguese possession. For Mormugão (Goa), which is 45 m. from Karwar, see p. 552 (Route 27).

Vengurla (29 m. from Mormugão and 196 m. from Bombay) is 84 m.

¹ See Capt. Alex. Hamilton's *New Account of the E. Indies* (1744).

S. of Ratnagiri, the hdqrs. of the district of that name, of which it forms part. It was ceded to the British in 1812 by the Rani of Sawantwari, and is situated on the border of that State. In former times it was notorious as a haunt of pirates. The public offices are in the old Dutch factory (1638); a British factory was established here in 1772. From Vengurla the steamers proceed direct to Bombay.

The coasting steamers of the British India Steam Navigation Co. occasionally call at Mangalore; there are no fixed dates, but the sailings are approximately at fortnightly intervals.

ROUTE 36.

MADRAS to COLOMBO by the South Indian Railway, by way of Chingleput, Tindivanam (for Gingee), Villupuram (for Pondicherry), **CUDDALORE** (for **FORT ST DAVID**), Porto Novo, Chidambaram, Mayavaram (for Tiruvalur and Tranquebar), Kumbakonam, **TANJORE** (for Negapatam), Trichinopoly, Dindigal, Kodaikanal, **MADURA** (for Tuticorin, Tinnevely, Kuttalam, Cape Comorin, Quilon and Trivandrum), Rameswaram and Dhanushkhodi (for Talaimannar in Ceylon).

The Ceylon Boat Mail train makes the journey from Madras to Dhanushkhodi (456 m.) in 19½ hrs.; and the remainder of the transit to Colombo, *via* Talaimannar, takes 16 hrs. Tanjore is reached in 9½ hrs., Trichinopoly in 10½ hrs., and Madura in 14 hrs.

Madras. Egmore station (p. 615).

35 m. from Madras is **Chingleput** junction station (R., D.B. $\frac{1}{2}$ m.). A line of 39 m. runs to Arkonam,

junction station (R.), on the Madras Railway route to Wadi (for Secunderabad), Poona, and Bombay (Route 28), and also for a line to Conjeeveram (Route 34).

75 m. Tindivanam station (R., D.B.).

(1) 16 m. N.W. of this station, and 30 m. S.W. of Chingleput, is **Wandiwash** (Vandivasu). Here may be seen a ruined fort and, 2 m. to the N., a rocky hill. Between the hill and the fort was fought, on 21st January 1760, the battle which broke the French power in S. India. Lally, who had been holding Wandiwash, was obliged by a mutiny of his troops to withdraw to Trichinopoly, but when Coote¹ occupied Wandiwash, he advanced against him, against the advice of Bussy. The result was disastrous. A chance shot from one of Coote's big guns fell on a tumbril of ammunition and killed eighty of the French artillerymen. The line was thrown into confusion and Lally was defeated with heavy loss and the capture of all his guns, ammunition and stores. Pondicherry fell in 1761 and Gingee (see below) in 1762, leaving the French without a single stronghold in the Carnatic. Twenty-one years later, on 21st January 1781, Coote arrived once more at Wandiwash to relieve Lieut. Flint, who had been gallantly defending himself in the fort for six weeks against Hyder 'Ali. He had been directed to take over the fort from a killadar and, although he had only a hundred sepoys with him, dictated an order of admission at the point of the bayonet. Coote was so impressed by the courage and resource of Flint that he recommended his immediate promotion to the rank of captain. The Court of Directors refused, on the ground that promotion must go by seniority!

(2) 18 m. W. of the Tindivanam station by road is **Gingee**

(*Chenji*), the most famous fort in the Carnatic. (Motor-bus service; R.H.: food to be taken.) The interest of the place is exclusively historical. The fortress comprises three strongly-fortified hills connected by long walls of circumvallation. The highest and most important hill, called Rajagiri, is about 500 ft. or 600 ft. high, and consists of a ridge terminating in an overhanging bluff, facing the S., and falling with a precipitous sweep to the plain on the N. On the summit of this bluff stands the citadel. On the S.W., where the crest of the ridge meets the base of the bluff, a narrow and steep ravine probably gave a difficult means of access to the top, across which the Hindu engineer built three walls, each about 20 ft. or 25 ft. high, rising one behind the other. On the N. side the Fort is defended by a narrow chasm, artificially prolonged and deepened, a wooden bridge over it being the only means of ingress into the citadel through a narrow stone gateway facing the bridge.

Several ruins of fine buildings are situated inside the Fort. Of these the most remarkable are the two pagodas and the Kaliyana Mahal, the latter consisting of a square court surrounded by rooms for the ladies of the Governor's household. In the middle is a square tower of eight storeys, with a pyramidal roof.

Other objects of interest are—the great gun on the top of Rajagiri, which has the figures 7560 stamped on it; the Raja's bathing-stone, a large smooth slab of granite; and the *Prisoners' Well*, a very singular boulder about 15 ft. to 20 ft. high, with a natural hollow passing through it, poised on a rock near the Chakrakulam, and surmounted by a low, circular, brick wall.

Gingee was a stronghold of the Vijayanagar power, overthrown by the allied Muhammadan Kings

¹ See note on p. 659.

of the Deccan in 1565 at Talikota. In 1677 the Fort fell to Sivaji by stratagem, and remained in Mahratta hands for twenty-one years. In 1690 the armies of the Delhi Emperor, under Zulfikar Khan, were despatched against Gingee with a view to the final extirpation of the Mahratta power: the Fort ultimately fell in 1698, and became the headquarters of the standing army in Arcot. In 1750 the French, under M. Bussy, captured it by a daring night surprise, and held it with an efficient garrison for eleven years, defeating one attack by the English in 1752.

98 m. **Villupuram** junction station (R., D.B.). Sleeping room at stn.; ticket to be purchased at the Booking-office; for rules for this and similar sleeping rooms on the S.I. Ry., see S.I. Ry. Time-table, ans.2. Adjoining the railway station there are locomotive workshops.

Branch lines N.W. to Katpadi (p. 542), passing through Vellore (p. 608) and E. to Pondicherry.

A metre-gauge line (110 m.) is in course of construction from Villupuram to Trichinopoly, which will serve as an alternative route to the existing main line. The section (33 m.) between Villupuram and Vriddhachalam is open for traffic; and also a branch (36 m.) from Vriddhachalam to Cuddalore (p. 659).

24 m. E. from Villupuram (122 m. from Madras) is **Pondicherry** (Puducheri) station * (46,535 inhabitants); long. $77^{\circ} 91'$, lat. $11^{\circ} 99'$, capital of the French establishments in India,¹ which have an extent of 115 sq. m., and a population of 266,159. British Con-

sulate in the Rue St Louis. Visitors arriving by sea (see Index and Directory) must be provided with a passport if they desire to enter British India. Pondicherry is a free port; but a British Customs cordon is drawn round the territory, and persons leaving by road are subject to a Customs examination. The means of locomotion here is a *pousse-pousse*, which is like a bath-chair, pushed by one or two men. The town, founded 1674 by François Martin, is divided by a canal into White (La Ville Blanche) and Black Towns—the White Town next the sea. The main streets run N. and S. from the *Place Dupleix* and parallel to the sea. The houses stand sideways to the streets, each facing a small flagged courtyard. The public garden, in which a statue of Joan of Arc has been placed, was presented to the town by the late M. François Gaudart, the founder of the St Catherine rolling mills, now owned by an English company. The Rodier spinning and weaving mills are also under local English direction; and there is a large trade in ground-nuts, which is in Greek hands.

Pondicherry can hardly be described as a "live" town. There are no European shops. The grass grows in the streets of the Ville Blanche and the two hotels, in spite of their names, are indifferent. The Hotel de l'Europe occupies the mansion of Camille Guerre, once a famous local *avocat*. The *Government House*, a handsome building, is situated at the N. side of the *Place* within 300 yds. of the sea. The *Cathedral*, built 1855, called *Notre Dame des Anges*, has two lofty square towers. The tomb of Bussy, whom Orme described as "the only man of distinction who served under Dupleix," is in the cemetery opposite the church; he died at Pondicherry in 1785, when holding the office of Governor.

¹ See *History of the French, in India* by G. B. Malletson (Grant, Edinburgh, 1893). Pondicherry is described in *A Wanderer's Log*, by C. Bechhofer (Mills & Boon 1912), and also in *A Book of South India*, by J. C. Molony (Methuen, 1926).

The *Pier* is 332 metres long. In front of the entrance to it, ranged in a semicircle, are eight pillars, 38 ft. high, of a greyish-blue stone, brought from Gingee (p. 655), which is 40 m. distant, said to have been given to M. Dupleix by the Governor of that place. On the third pillar on the left side, looking towards the sea, is an astronomical plan by some savants who were charged with fixing the longitude of Pondicherry. 50 yds. W. of the pier is the *Statue of Dupleix* (Governor 1741-54), on a pedestal formed of old fragments of temples brought from Gingee. In the *Public Library* are some valuable records. At the S. end of the promenade is the *Hôtel de Ville*, a neat building, and E. of this, on the beach, is a battery of eight small guns. There is also a *Lighthouse*, which shows a light 89 ft. above the sea. The town of Pondicherry is lit by electricity. The territory of Pondicherry comprises 8 communes and 141 villages.

In 1672 Pondicherry, then a small village, was purchased by the French from the King of Bijapur, seventy-one years after the first arrival of French ships in India. In 1693 the Dutch took Pondicherry, but restored it in 1697 at the Peace of Ryswick. Under Dupleix it increased wonderfully. On the 26th of August 1748 Admiral Boscawen laid siege to it with an army of 6000 men, but was compelled to raise the siege on the 6th of October, with the loss of 1065 Europeans. The French garrison consisted of 1800 Europeans and 2000 sepoys. On the 29th of April 1758 Lally landed at Pondicherry and commenced a war, which ended ruinously for the French. In the beginning of July 1760 Colonel Coote, with 2000 Europeans and 6000 Indians, began to blockade Pondicherry. On the 2nd of September the British army, having received reinforcements,

carried the bound-hedge,¹ and two of the four redoubts which defended it. On the 27th November M. Lally, finding the garrison hard pressed by famine, expelled all the Indian inhabitants from the town—1400 in number. These, being driven back by the British, attempted to re-enter the fort, but were fired on by the French, and some of them killed. For eight days these persons in despair wandered between the lines of the two hostile armies, subsisting on the food which they had about them and the roots of grass. At last, finding Lally inexorable, the British suffered them to pass. The hopes of deliverance in the minds of the French were dispelled by the arrival of fresh British men-of-war from Ceylon and Madras, raising the blockading fleet again to eleven sail of the line. On 16th January 1761, the town surrendered, as the garrison was reduced to 1100 men of the line fit for duty, and these enfeebled by famine and fatigue, and with but two days' provisions. In 1763 Pondicherry was restored to the French. On 9th August 1778 Sir Hector Munro, with an army of 10,500 men, of whom 1500 were Europeans, again laid siege to it. On the 10th Sir E. Vernon, with four ships, fought an indecisive battle in the roads with five French ships under M. Tronjoly, who some days after sailed off at night, and left the town to its fate. Pondicherry, after an obstinate defence, was surrendered in the middle of October by M. Bellecombe, the Governor, and shortly after the fortifications were destroyed. In 1783 it was retransferred to the French, and on the 23rd of August 1793 retaken by the British. The Treaty of Amiens, 1802, restored it to its original masters, whereupon Napoleon sent thither General de Caen, with seven other generals, 1400

¹ This thick cactus-fence still surrounds Pondicherry on the landward side.

regulars, a bodyguard of eighty horse, and £100,000 in specie, with a view, doubtless, to extensive operations in India. His intentions, however, whatever they may have been, were defeated by the reoccupation of Pondicherry by the British in 1803. The place was then attached to S. Arcot, and yielded a yearly revenue of Rs.45,000. When restored to the French in 1817 the population was only 25,000.

French India.—The French possessions in India are composed of the five establishments of Pondicherry and Karikal on the Coromandel coast, Chandernagore in Bengal, Yanaon on the Orissa coast, and Mahé on the Malabar coast, besides some small settlements known by the name of *loges*, of which the principal are at Surat, Patna, Kasimbazar, Dacca, Balasore, Masulipatam, and Calicut. They cover an area of 115 sq. m.

The population, according to the estimate of 1924, is distributed as follows:—

	Area.	Persons.
Pondicherry	113 sq. m.	177,483
Karikal	43 „	56,922
Chandernagore	3 „	26,941
Yanaon	5 „	4,715
Mahé	26 „	11,455
Total		277,516

At the head of the Administration there is a Governor, residing at Pondicherry, assisted by a Privy Council, over which he presides, and in which seats are assigned to the General Secretary of the Government, the Procureur Général, the Chief of the Judicial Service, and two civil members, named every two years by decree of the President of the Republic. Administrators represent the Governor in the smaller possessions. The population includes about 1000 French and 2000 persons of mixed descent; by treaty engagement no French

troops are maintained in the colonies, and no military works are erected in them. The High Court of Appeal, a handsome square building, is at Pondicherry; and there are courts of first instance at Pondicherry, Karikal, and Chandernagore, and a Justice of the Peace at each of the five establishments. The Departments of medical aid and public instruction are paid almost entirely from the local budget, which amounts to 17 lakhs of rupees. In addition to the Colonial College at Pondicherry, the five establishments have 61 Govt. primary schools and 3 colleges with 10,300 pupils.

Pondicherry possesses three mills for cotton spinning and mechanical weaving, with 68,631 spindles and 1662 weaving-frames. The three mills employ 7900 workers inside the factories and 2700 workers outside. There is also an iron foundry, employing 450 workers. The chief exports are oilseeds.

The colony enjoys all the political advantages of the metropolis, and is represented in the Senate and the Chamber of Deputies. The form of local government comprises in detail—

- (1) A *conseil général*, consisting of twenty-eight members, responsible for the local budget and every fiscal tax credited to this budget.
- (2) A *conseil local* for each establishment, responsible for attending to its various requirements.
- (3) Seventeen municipal councils, representing the interests of the communes. These 17 communes of the 5 establishments are distributed as follows: Pondicherry, 8 communes; Karikal, 6; Chandernagore, 1; Yanaon, 1; Mahé, 1.

All these councils are constituted by two groups of separate

electors: (a) Europeans, descendants of Europeans, and similar persons; (b) the French Indians. Each group has the right, in principle, to half the seats of the elected body. At the places where the first group is not represented by a minimum of twenty electors the whole number of seats is transferred to the second group; but the case generally occurs only among the municipal councils of the rural communes. The representative Deputy is elected by the whole electoral body of the two groups together; the representative Senator is elected by the members of the elected councils together. The number of electors is distributed as follows:—

	First Group, 1st list.	Second Group, 2nd list.
Pondicherry	496	37,920
Karikal	77	10,888
Chandernagore	20	4,047
Yanaon	2	789
Mahé	30	1,773

For Chandernagore and Mahé, see pp. 131 and 650; for Karikal, see p. 661.

125 m. from Madras (Egmore Stn.) is **Cuddalore** New Town station. The bungalow known as the "Garden-house," built in 1732-3, is the only Collector's residence in the Madras Presidency which is officially recognised as entitled to fly the Union Jack. Cuddalore is the hdqrs. of the S. Arcot district.

127 m. **Cuddalore** Old Town station (R.).

From the former station Fort St David can most conveniently be visited; it is also nearest to the public offices in the civil station and the D.B. At the Old Town station are the residences of a considerable number of Europeans, also the jail and Church, which is interesting on account of the old tombs in and about it.

Fort St David, 1½ m. from New Town, is interesting on account of its history. From 1690, when it was purchased by the East India Company, it remained in the hands of the British until 1758, Clive being Governor in 1756, when it was besieged and taken, after many unsuccessful attempts, by the French, only to fall back into British hands at the Peace of 1783.¹ All that now remains of the fort are the ditch, the foundations of the ramparts, and some masses of the fallen walls.

144 m. **Porto Novo** station. The town stands on the N. bank of the River Vellar, close to the sea, and is called by the Indians Mahmud Bandar and Farangipettai. The Portuguese settled here during the latter part of the 16th century, being the first Europeans who landed on the Coromandel coast. In 1678 the Dutch abandoned their factory at Porto Novo and Devanampatnam and went to Pulicat (p. 520).

The chief historical recollection which attaches to Porto Novo is that, within 3 m. of it to the N., close to the seashore, was fought one of the most important Indian battles of the last century. Sir Eyre Coote² had arrived at Porto Novo on the 19th of June 1781, after having been repulsed the day before in an attack on the fortified pagoda of Chidambaram, which he conducted in person. Hyder Ali was encouraged by the success of his troops on that occasion to hazard a battle, and he took up and fortified an advan-

¹ Bernadotte, afterwards Marshal of France and King of Sweden, was captured in a sortie from the Fort during the siege of 1783.

² Sir Eyre Coote first distinguished himself at Plassey; won the great victory of Wandiwash on 21st January 1760; took Pondicherry on 16th January 1761; was made K.C.B. in 1771; was Commander-in-Chief in Bengal, 1779; defeated Hyder at Arni (74 m. S.W. of Madras) on 2nd June 1782; and was sent again by Hastings in 1783 to check Hyder 'Ali, but died at Madras, worn out by his campaigns, on 28th April 1783.

tageous position on the only road by which the British could advance to Cuddalore. The British force consisted of 2000 Europeans and 6000 sepoys, and Hyder 'Ali's forces of 40,000 Indians. Of the victory won by the former, Sir J. Malcolm speaks in the following terms: "If a moment was to be named when the existence of the British power depended upon its native troops, we should fix upon the Battle of Porto Novo. Driven to the seashore, attacked by an enemy exulting in recent success, confident in his numbers, and strong in the terror of his name, every circumstance combined that could dishearten the small body of men on whom the fate of the war depended. Not a heart shrank from the trial." The victory broke the spell cast over the name of Hyder by the defeat of Colonel Baillie at Pollilore (p. 633) in the preceding year. Coote especially praised the steadiness of the 73rd Highlanders and presented them with a sum of money to purchase a pipe of silver in honour of the day.

151 m. **Chidambaram** (Chillumbrum) station (D.B. 1½ m.). Once the capital of the Chola kingdom.

The *Temples* at Chidambaram are the oldest in the S. of India, and portions of them are gems of Dravidian art. The principal temple is sacred to Siva, and is affirmed to have been erected, or at least embellished, by Hiranya Varna Chakravarti, the "golden-coloured Emperor," who is said to have been a leper, and to have originally borne the name of Swetavarma, the "white-coloured," on account of his leprosy, and to have come S. on a pilgrimage. He miraculously recovered at Chidambaram after taking a bath in the tank in the centre of the temple, and thereupon rebuilt or enlarged the temples. He is said to have brought 3000 Brahmans from the N. According to

tradition, Vira Chola Raja (927-77 A.D.) saw the Sabhapati—i.e., Siva—dancing on the seashore with his wife, Parvati, and erected the Kanak Sabha, or golden shrine, in memory of the god, who is here called *Natesa* or *Nateswar*, "God of Dancing." The whole area is surrounded by two high walls, which contain thirty-two acres. The outer wall of all is 1800 ft. long from N. to S. and 1480 ft. from E. to W. Nearly in the centre of this vast space is a fine tank, 315 ft. by 180 ft. At the four points of the compass are four vast gopurams, those on the N. and S. being about 160 ft. high.

Near the tank is the Hall of 1000 Pillars, which is 340 ft. long and 190 ft. broad. Fergusson (*Hist. of Ind. Arch.*, I, 377) makes the number of pillars in the hall 984. This is one of the very rare instances in S. India where the so-called Hall of 1000 Pillars is almost furnished with that number.

The *Temple of Parvati*, known as Sivakami Amman, the wife of Siva, is principally remarkable for its porch, which is of singular elegance. The roof is supported by bracketing shafts tied with transverse purlins till a space of only 9 ft. is left to be spanned. The outer enclosure in which this temple stands is very elaborate, with two storeys of pillars.

Adjoining this Temple of Parvati is one to *Subrahmanya*, the enclosure of which is 250 ft. by 305 ft. The images of a peacock and two elephants stand before it, then a portico with four pillars in front, with an inner court. Fergusson assigns the end of the 17th or beginning of the 18th century as the date of this temple. There is another small one to *Subrahmanya*, and one to *Ganesh* in the corner of the great enclosure. There are also several small *mandapams* in other parts of the great enclosure, and one to the S. of the court of Parvati's Temple.

The principal temple to Siva is about 30 yds. S. of the tank. In the S.W. corner of this enclosure is a temple to Parvati, and in the centre of the S. side an idol of Nateswar. In the centre of all is the sanctuary, which consists of two parts. In this is the most sacred image of the dancing Siva, which is that of a naked giant with four arms, his right leg planted on the ground and his left lifted sideways. The roof of this building is covered with plates of gilt copper. There is also a tiny shrine, of which Fergusson says: "The oldest thing now existing here is a little shrine in the innermost enclosure. A porch of fifty-six pillars about 8 ft. high, and most delicately carved, resting on a stylobate, ornamented with dancing figures, more graceful and more elegantly executed than any others of their class, so far as I know, in S. India. At the sides are wheels and horses, the whole being intended to represent a car.

Whitewash and modern alterations have sadly disfigured this gem, but enough remains to show how exquisite, and consequently how ancient, it was." This pagoda was surrendered to the British in 1760 without a shot; but in 1781 Hyder 'Ali garrisoned it with 3000 men, and Sir Eyre Coote was repulsed from it with the loss of one gun.

174 m. from Madras is **Mayavaram** station (D.B.). The town, 3 m. distant (28,617 inhabitants), is a place of pilgrimage in November. The Siva Pagoda has one large gopuram and one small one. To the W. of the Great Gopuram is a *Teppa Kulam* Tank.

From Mayavaram a line runs S. to 10 m. Peralam, junction for a short line of 14 m. to the French settlement of **Karikal** (lat. $10^{\circ} 55'$, long. $79^{\circ} 52'$), which is situated on a branch of the Cauvery, 12 m. N. of Negapatam (p. 667) and con-

sists of 6 communes and 110 villages. Tranquebar (see p. 662) is 6 m. N. of Karikal. The line continues from Peralam to (24 m.) **Tiruvalur** (on the line from Tanjore to Negapatam), Mutupet (54 m.), and Pattukottai (71 m.), and Arantangi (99 m.). At Tiruturai-pundi Jn. (40 m. from Mayavaram) there is a branch (23 m.) to Agastiyampalli, near the lighthouse on Point Calimere (Kalimettu, "Hill of the Euphorbia"). On the beach at the Point is a column, 90 ft. high, which bears an inscription on the S.W. face, recording its erection by Sarfoji, the Raja of Tanjore, in 1814, in commemoration of "the downfall of Bonaparte"; it was used at one time as a lighthouse.

The richly-endowed Temple of Sri Tyagarajaswami at **Tiruvalur** has a fine tank and car. It contrasts curiously with that at Tanjore in the principles on which it was designed, and serves to exemplify the mode in which, unfortunately, most Dravidian temples were aggregated. Fergusson writes of it (*Ind. Arch.*, 1, 367):—

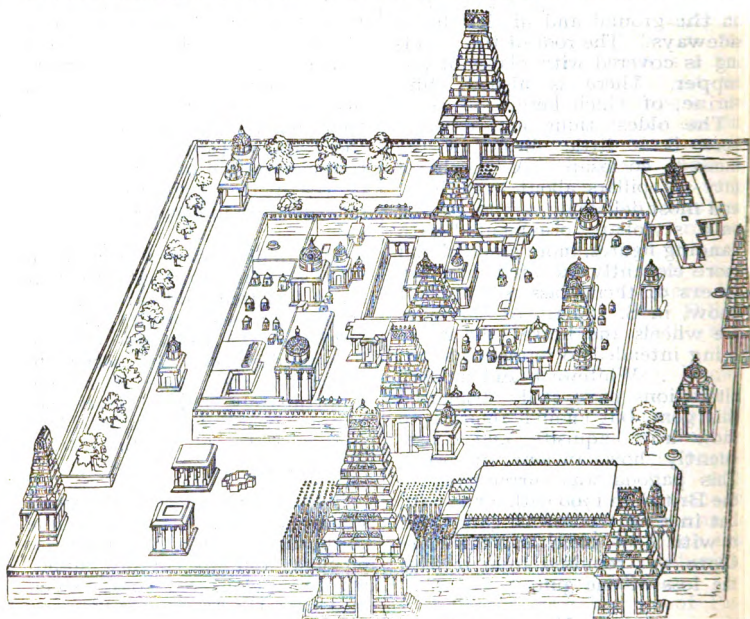
"The nucleus here was a small village temple. It is a double shrine, dedicated to Valmikeswara, or Siva, and his consort, standing in a cloistered court which measures 191 ft. by 156 ft. over all, and has one gopuram in front.

There is nothing to distinguish it from the ordinary temples found in every village. It, however, at some subsequent period became sacred or rich, and a second or outer court was added, measuring 470 ft. each way, with two gopurams, higher than the original one, and containing within its walls numberless little shrines and porches. Additions were again made at some subsequent date, the whole being enclosed in a court 957 ft. by 726 ft., this time with five gopurams . . . and

several important shrines. When the last addition was made, it was intended to endow the temple with one of those great halls which were considered indispensable in temples of the first class. Generally they had, or were intended to have, 1000 columns; this one has only 807, and almost one-half of these mere posts, not fitted to

elaboration as they approach the sanctuary is a mistake which nothing can redeem." (See also p. xcvi of the Introd.)

Another branch line (18 m.) runs from Mayavaram Junction to **Tranquebar**, a Danish settlement from 1616 to 1845, when it was acquired by the British Govern-



Bird's-eye View, Temple of Tiruvalur.

carry a roof of any sort. There can, however, be very little doubt that, had time and money been available, it would have been completed to the typical extent.

"The general effect of such a design as this may be gathered from the woodcut bird's-eye view. As an artistic design, nothing can be worse. The gateways irregularly spaced in a great blank wall lose half their dignity from their positions; and the bathos of their decreasing in size (see p. 670) and

ment with Serampore. The Tamil name *Tarangambadi* means "the village by the sound of the wave." It is now a decaying place. The old fortress, known as the *Dansborg* ("Danish Castle") was built by Ovo Gedde on behalf of the Danish E.I. Company in 1620. It is now converted into a travellers' bungalow. A wooden tablet, bearing a curious monogram of Christian V. of Denmark, dated 1677, which was formerly fixed in one of the rooms in the Dansborg,

has been removed to the Government Museum at Madras. The first Protestant mission in India was founded at Tranquebar in 1706. There are several very old churches in Tranquebar, and some interesting relics of earlier Christianity survive, including no less than five cemeteries, the tombs in which bear inscriptions in nine languages, Armenian, Danish, Dutch, English, French, German, Latin, Portuguese and Swedish. Tranquebar is in many respects the most interesting old European town in India. The carriage-road enters by an imposing gateway, bearing the date 1792, and the monogram of the King of Denmark. The principal thoroughfares retain their names of King and Queen Street; and the houses, which are solid and well-built, have no compounds but adjoin each other. On the E. side of King Street is the *Lutheran Mission Church* ("New Jerusalem") and opposite is the English Church ("Zion"). The spire of the latter is shaped like a spiked helmet, and the bell is dated 1752; in the vestry is a painting of the Last Supper, coloured in relief upon wood, in the manner of Albrecht Dürer. Catherine Noël Werlée, the wife of G. F. Grand, a Bengal civilian, whose escapade with Philip Francis cost the latter Rs. 50,000, and who subsequently married Talleyrand, was born here.

194 m. **Kumbakonam** station (R., D.B.), in the Tanjore District (pop. 60,700). The pagodas stand near the centre of the town, and about 1 m. from the station. The most interesting temples at Kumbakonam are the Sarangapani, Banapurisvara, Ramasvami, Nagesvara, and the Kumbhesvara. The largest pagoda is dedicated to Vishnu, (Sarangapani), and the Great Gopuram here has eleven storeys.¹ The total height is 147 ft. A

street arched over and 330 ft. long and 15 ft. broad, with shops on either side, leads to the Siva Pagoda, or Temple of Kumbeshwara.

To the E. side of the road from the station to the temples is the *Mahamahham Tank*—a fine tank, into which it is said the Ganges flows once in twelve years, the last occasion having been 6th March 1921. On these occasions so vast a concourse of people enter the water to bathe that the surface rises some inches. The tank has sixteen small but picturesque pagodas studding its banks. The principal one is on the N. side of the tank.

The *Government College* at Kumbakonam was formerly one of the leading educational institutions in India, and procured for the town the distinction of being called the Cambridge of Southern India.

218 m. **TANJORE** junction station (R., D.B. Lat. 10° 47', long. 79° 10'. Pop. 59,913). The delta of the Cauvery River, near the head of which Tanjore stands, is considered the garden of Southern India. It carries a dense population, and is highly irrigated.

The Tanjore country was under the Cholas during the whole of their supremacy. Vyankoji, the brother of Sivaji, the Great Mahratta, reduced Tanjore, proclaimed himself independent, and established a Mahratta dynasty, which lasted till 1779. The British first came into contact with the place, by their expedition in 1749, with a view to the restoration of a deposed Raja. In 1758 it was attacked by the French under Lally, who extorted large sums from the reigning Mahratta Raja. Colonel Joseph Smith captured the fort in 1773, and again in 1776 it was occupied by the English. Raja Sarfoji, by a treaty in 1779, ceded the dependent territory to the British, retaining only the capital and a small tract

¹ See Fergusson's *Ind. Arch.*, i, 395.

of country around. Sarfoji was succeeded in 1832 by his son Sivaji, who died in 1853 without legitimate male issue, when the State lapsed to the British Government. "For ages Tanjore has been one of the chief political, literary, and religious centres of the South. Its monuments of Hindu art and early civilisation are of first importance."

The *Little Fort* contains the *Great Temple*, which, with the Palace of the Raja in the Great Fort and Schwartz's Church, are the sights of Tanjore. The *two Forts* of Tanjore, which are much dismantled, are so connected that they may be almost regarded as one. On a rampart there is a huge cannon called Raja Gopal, 24 ft. in length, 10 ft. in its outer circumference, and 2 ft. in its bore, which has only once been fired.

The *Great Pagoda* (early 11th century).—The entrance is under a gopuram 90 ft. high. Then follow a passage 170 ft. long, and a second gopuram of smaller dimensions. There is a long inscription in Tamil characters on either side of the passage through the second gopuram. From this the outer enclosure of the temple is entered. It is 415 ft. by 800 ft., and is surrounded by cloister chapels, each containing a large lingam. Visitors may walk everywhere in the enclosure, but cannot enter the Great Temple or the halls of approach to it, though the sanctity of the temple was destroyed by its occupation on one occasion by the French. On the right is the *Yajnasala*, a place where sacrifices are offered, and the *Sabhapati Kovil*, or Shrine of Siva, as the presiding god of an assembly. There are two *Bali-pidams*, or altars, close to the E. wall, one inside and one outside; and at about 40 ft. from the E. wall is a gigantic *Nandi* (bull) in black granite, a monolith 12 ft.

10 in. high and 16 ft. long, sculptured out of a solid block of rock, said to have been brought a distance of 400 m. It is daily anointed with oil, which makes it shine like the finest bronze. W. of this again is the *Vimana*, or Temple, the most beautiful and effective of all Dravidian temples. A portico supported by three rows of pillars leads to two halls 75 ft. by 70 ft. each; beyond these is the adytum, 56 ft. by 54 ft., over which rises the vast tower of the *vimana*, 200 ft. high, including the great monolithic dome-shaped top and the *Stupi*, or ornament. N.E. of the Great Tower is the *Chandikasan Kovil*, or shrine of the god who reports to the chief god the arrival of worshippers. W. of this, at the N.W. corner of the outer enclosure, is the *Subrahmanya Kovil*, Shrine of Kartikkeya, the son of Siva and deity of war, who is called *Subrahmanya* (from *su*, good, *brahman*, a Brahman) because he is so good to Brahmans and their especial protector. Fergusson says of this wonderful shrine that it "is as exquisite a piece of decorative architecture as is to be found in the S. of India, and though small, almost divides our admiration with the temple itself" (*Ind. Arch.*, 1, 365). It consists of a tower 55 ft. high, raised on a base 45 ft. sq., adorned with pillars and pilasters, which ornament is continued along a corridor 50 ft. long, communicating with a second building 50 ft. sq. to the E. It is probably of the 16th or 17th century, and is a beautiful specimen of the latest style of Dravidian architecture. Its carving seems to be in imitation of wood. "Against one of its outer walls is placed a water-spout. The water which flows from it is poured over the idols inside, and is drunk by worshippers as a meritorious and purifying act."

The base of the grand temple—

i.e., the *vimana* and halls leading to it—is covered with Tamil inscriptions, which would give the date as approximately 1000 A.D. The pyramidal tower over the shrine has evidently often been repaired in its upper part, where the images of gods and demons with which it is covered are now only of cement. This tower is only 38 ft. lower than the Kutb Minar at Delhi. Many picturesque views of it are obtained across the moat and walls of the fort, and it is well worth while making the whole circuit of these.

Dr Burnell says in his pamphlet, *The Great Temple of Tanjore*: "This temple is really the most remarkable of all the temples in the extreme S. of India; is one of the oldest; and as it has been preserved with little alteration, if not, perhaps, the largest, it is the best specimen of the style of architecture peculiar to India S. of Madras. This style arose under the Chola (or Tanjore) Kings in the 11th century A.D., when nearly all the great temples to Siva in S. India were built, and it continued in use in the 12th and 13th centuries, during which the great temples to Vishnu were erected. Up to the beginning of the 16th century these temples remained almost unchanged, but at that time all S. India became subject to the Kings of Vijayanagar, and one of these, named Krishnaraya (1509-30), rebuilt or added to most of the great temples of the S. The chief feature of the architecture of this later period is the construction of the enormous *gopurams* which are so conspicuous at Conjeeveram, Chidambaram, and Sri Rangam. All these were built by Krishnaraya; they do not form part of the original style, but were intended as fortifications to protect the shrines from foreign invaders, and certain plunder and desecration, as the Hindus first

discovered on the Muhammadan invasion of 1310 A.D."

The **Palace**.—This building is in the Great Fort, lying E. of the Little Fort. Some portions of it are occupied by the representatives of the Palace family, and the remainder is used for Government offices. It is a vast building of masonry, and stands on the left of the street, which runs Northward through the fort; it was built about 1550 A.D. After passing through two quadrangles a third is entered, on the S. side of which is a building like a *gopuram*, 190 ft. high, with eight storeys. It was once an armoury. Fergusson writes (*Ind. Arch.*, 1, 416) of this tower: "As you approach Tanjore, you see two great *vimanas* not unlike each other in dimensions or outline, and at a distance can hardly distinguish which belongs to the great temple. On closer inspection, however, that of the Palace turns out to be made up of dumpy pilasters and fat balusters, and ill-designed mouldings of Italian architecture, mixed up with a few details of Indian art! A more curious and tasteless jumble can hardly be found in Calcutta or Lucknow." On the E. of the quadrangle is the *Telugu Darbar-room* of the Nayakkar Kings. On the sides of a platform of black granite are sculptured in alto-relievo Surs and Asurs fighting. On this platform stands a white marble statue, by Flaxman,¹ of Sarfoji, the pupil of Schwartz, and the last Raja but one. He is standing with the palms of his hands joined as if in prayer, and he wears the curious triangular pointed cap used by the Tanjore Princes in the last half-century of their rule. The picture-gallery which was in this hall has been dispersed. A curious portrait of

¹ The *Tanjore Gazetteer* of 1906 states that this marble statue is by Chantrey and not by Flaxman. There is no inscription upon it.

Lord Pigot (Governor of Fort St George from 1756 to 1763, and again from 1775 to 1776) has been removed to the Banqueting Hall at Madras (p. 616); and the portraits of the Rajas of Tanjore have been purchased by the Palace family, who have also acquired the fine bust of Nelson, presented to Raja Sarfoji by the Hon. Anne Seymour Damer, whose work it is. On the opposite side of the quadrangle is the *Library*, in which is a remarkable collection of more than 18,000 MSS. in Sanskrit, Tamil and other Indian languages, and also a large collection of printed books. This library (which has been converted into a public trust) dates from the end of the 16th or beginning of the 17th century. In the *Mahratta Darbar*, which is in another quadrangle, is a large picture of Sivaji, the last Raja, with his chief secretary and his Diwan.

E. again lies *Schwartz's Church*, close to the Sivaganga Tank. Over the gate is the date 1777, and over the façade of the church is 1779 A.D. In the centre, opposite the communion-table, is a very fine group of figures in white marble, by Flaxman, representing the death of Schwartz. The aged missionary is extended on his bed, and on his left stands the Raja Sarfoji, his pupil, with two attendants, while on his right is the missionary Kohlmer, and near the bottom of the bed are four boys. The inscription contains a summary of his career. The small house N.W. of the church, and close to it, is said to have been Schwartz's habitation. Lord Valentia (1804) and Bishop Heber (1826) have left flattering accounts of Sarfoji. He was brought up among Christians but never abandoned the Hindu faith.

Next to the Sivaganga Tank is the *People's Park*. Other buildings of interest to the visitor at Tanjore are the Sangita Mahal, a miniature of the surviving Court of Tirumala

Nayak's Palace in Madura; the Arsenal or Armoury; and the Clock-tower, so called on account of a curious device for marking the time, which was once fixed in it, but has now been removed, as it was found to be unsafe.

The Tanjore District was the scene of the earliest labours of Protestant missionaries in India. In 1706 the German missionaries Ziegenbalg and Plütschan established a Lutheran mission in the Danish settlement of Tranquebar, under the patronage of King Frederick IV. of Denmark; and in 1841 their establishments were taken over by the Leipzig Evangelical Lutheran Mission, which subsequently extended its operations into the District. The mission at Tanjore was founded in 1778 by the Rev. C. F. Schwartz, of the Tranquebar Mission, who some time previously had transferred his services to the Society for Promoting Christian Knowledge. The mission establishments at Tanjore were taken over in 1826 by the Society for the Propagation of the Gospel, which subsequently founded new stations in several parts of the District.

Roman Catholic missions in Tanjore date from the first half of the 17th century. Their churches and chapels are scattered over the whole District, but their principal seats are Negapatam, Velanganni (on the coast, 6 m. S. of Negapatam), Tanjore, Vallam, and Kumbakonam. The St Joseph's College, founded by French Jesuits at Negapatam in 1846, was removed to Trichinopoly in 1883.

In St Peter's cemetery is the grave of the tenth Lord Hastings, who died in 1875 of fever contracted while tiger-shooting with King Edward, then Prince of Wales.

Tanjore is famous for its silk, carpets, jewellery repoussé work, copper ware, and models in pith. The repoussé work, and the copper

work inlaid with brass and silver *swami* (or god) figures, are among the best in all India.

Vallam, 7 m. from Tanjore, is the hdqrs. of the Collector of the District. The Fort was taken by the British in 1771 and handed over to Raja Tulsaji. There are two tombs of British officers in the cemetery which relate to this period.

Motor-bus service (36 m.) from Tanjore to **Pudukkottai** (pop. 30,000), capital of the State of that name, with some fine public buildings and a collection of pictures in the palace. The area of the State is 1179 sq. m., with a pop. of 426,813 and an annual revenue of nearly 23 lakhs. The ruling family, known as the Tondiman Rajas, have played a leading part in S. Indian history. The late Raja died in Europe in May 1928.

A branch line runs from Tanjore, 48 m. E., *via* Tiruvalur junction (p. 661) to

Negapatam (R.; pop. 54,016), an old and flourishing port doing a brisk trade with the Straits Settlements and Coast Ports. Large workshops of the S.I. Railway. According to Colonel Yule, it is the "Malefattan" of Arab geographers. It was one of the earliest settlements of the Portuguese, was taken by the Dutch in 1660 and by the British in 1781. The Dutch Church and the old graves in the Karicop cemetery are interesting. Colonel Francis Swain Ward (1794), who presented a number of his paintings of Indian scenery to the E. India Company (now at the India Office) is buried here. Steamers belonging to the B.I.S.N. Company run once a fortnight to the Straits and occasionally to Coast ports. The line runs on from Negapatam to

53 m. **Nagore**. A well-known centre of Muhammadanism in S. India. Interesting 16th-century Mosque, enclosing the tomb of a Muhammadan saint: the inner doors are plated with silver, a somewhat unusual adornment, which recalls a Hindu temple rather than an orthodox Moslem place of worship.

248 m. from Madras (Egmore Stn.), **Trichinopoly** junction station (R.) ★ (D.B.; Railway Hotel; pop. 120,422). The name is properly Tirusirapalli, or the "City of the Three-headed Demon." The famous **Rock** dominates the landscape for some miles before reaching the station. A branch railway runs (88 m. W.) to Erode (p. 639), the junction for the broad-gauge line from Madras to the West Coast (Route 35). Passengers from the South for Ootacamund change here and proceed by this line. **St John's Church**, in which Bishop Reginald Heber is buried, is close to the station; the grave in the chancel is marked by a fine brass. The bath in which he accidentally met with his death in 1826 is near the house and court of the Judge of Trichinopoly. There is a marble slab monument on the spot. Near the same spot is a monument erected in memory of Mr H. O. D. Harding, I.C.S., District and Sessions Judge, who was murdered by a fanatic, as he descended from his carriage to enter the Court on 22nd February 1916. The two historic masses of granite, the Golden Rock and the Fakir's Rock, are in the plain to the S. The Golden Rock overhangs the Central Jail. Near it the French were defeated in two engagements in the second siege, which followed at once on the first, and the demand of the Mysore General that the town should be made over to him. It owes its name to the fact that golden coins were found here, and a syndicat

was formed some years ago which endeavoured without success to discover further buried treasure. There are Boys' and Girls' Schools and a Convent. Near the Gymkhana is the Cathedral House of the Bishop of Trichinopoly.

S. of the Jn. Stn. are the Barracks and Race-course.

3 m. S.W. of Trichinopoly is the fortified pagoda which was occupied by the French in 1753, and recaptured by the British under Colonel Stringer Lawrence.

33 m. S. of Trichinopoly is Pudukkottai (motor-bus service from Tanjore, see p. 667).

Trichinopoly Fort station is 3 m. on the *Erode Branch*. The Fort has been dismantled, but this part of the town is still known as "the fort."

It will be remembered that it was to relieve the Siege of Trichinopoly—in which the English candidate for the Nawabship of Arcot, Muhammad 'Ali, was beleaguered by Chanda Sahib—that Clive seized the Fort of Arcot in 1751 (see p. 611).

In November 1753 the French made a night attack on the Fort, and succeeded in entering the outer line of fortifications at *Dalton's Battery* at the N.W. angle. Here there was a pit 30 ft. deep, into which many of the assailants fell. Their screams alarmed the garrison, who repelled them, and made 360 of the French prisoners. This portion of the old Fort is all that has been left standing. The moat that surrounded it has been filled in and planted as a boulevard.

On the N. side of the town, with a temple on it, is the **Rock**. As Trichinopoly is one of the hottest places in S. India, an early morning visit is advisable. At the foot of the W. side is a handsome *Teppa Kulam* or sacred tank, with stone steps and a *mandapam*, or pavilion, in the centre. E. of the tank is a house, which bears a medallion

with an inscription stating that Robert (afterwards Lord) Clive occupied it, *circa* 1752. There is, however, little evidence to corroborate the legend. The most striking buildings on this side of the town are St Joseph's College and the S.P.G. College (now named Bishop Heber's College). The former is situated in the N.W. corner of the Fort, near the Main Guard Gate. It was founded by the Jesuit Mission in 1844 at Negapatam, and was transferred to Trichinopoly in 1883, when Father Sewell, who embraced the R.C. faith after his retirement from the army in 1877 with the rank of Major, became the Manager of the College. He was largely instrumental in the development of Trichinopoly as an educational centre. He died in Madras in 1915, aged 78, and was buried in the College Chapel. St Joseph's College is a leading College of the Madras Presidency. It has an imposing array of buildings, including the College Church and the Lawley Hall. Bishop Heber's College was the development of various schools founded in the 18th century by the Rev. C. F. Schwartz of the S.P.C.K. It is situated E. of the Main Guard Gate, and just opposite the *Teppa Kulam*. In 1762 Schwartz visited Trichinopoly and founded the first English Church in 1765-6. This is called Christ Church, and stands opposite to the Caldwell Hostel on the way to Sri Rangam. Schwartz remained for many years in Trichinopoly and died in Tanjore in 1798, aged 72. A third—the National College—is close by, a Hindu College, the creation of the Nattukottai Chettis. An interesting tomb in Christ Church cemetery is that of Mrs Rebecca Darke (1797), whose granddaughter, Julia Floyd, married Sir Robert Peel, the Prime Minister.

The ascent of the Rock is by a covered passage which leads up

to the top from the S.; on the sides of the passage are stone elephants and pillars about 18 ft. high, which bear the stamp of Jain architecture. The pillars have carved capitals representing the lion of the S. and various figures of men and women. The frieze above is ornamented with carvings of animals. Flights of very steep steps, 290 in number, coloured white with red stripes, lead through this passage to the vestibule of a Saiva temple on the left, whence on certain days the images of the gods—viz., of Siva, Parvati, Ganesh, and Subrahmanya or Skanda—are carried in procession. In front of the temple is a huge Nandi (bull) covered with silver plates, which must be very valuable. The temple and the original Fort were built by a Madura Prince in 1660-70. The cave temples, cut into the rock on the left side of the steps, are worth visiting. The pillars in these temples bear archaic inscriptions in Pallava characters. Halfway up, the stairs emerge into the open at a small shrine dedicated to Ganesh (here called Pillayar, "the Son"): it is lighted up every evening by three lamps. The steps of the ascent were the scene of a terrible disaster in 1849. A vast crowd had assembled to worship. A panic arose, and in the crush which ensued 500 people were killed. From the temple the stairs turn E. and lead out on to the surface of the Rock, up which a rough approach has been cut to the *mandapam*, or pavilion, crowning the top, from which there is one of the finest panoramic views to be seen in the plains of India. On all sides the eye traverses the plain for 20 m. or 30 m. The height of the Rock is only 236 ft., but the plain is so flat that this height is sufficient to dominate a vast expanse of country. On the S. the most conspicuous object is the *Golden Rock*, about 100 ft. high. Carry-

ing the eye to the S.E. of this rock, a patch of low, rocky ground is seen about 40 ft. high. This is *French Rocks*, about 2 m. from the fort. Within the town, distant only a few hundred yards, is the *Nawab's Palace*, which has been restored by Government, and is used for courts and public offices. To the N. of the Fort Rock is the broad shallow bed of the Cauvery, in which, except in the rains, there is but a narrow streak of water. Beyond is the *Island of Sri Ranganam*, which the French occupied for several years, taking up their quarters in the two great temples, that of *Sri Ranganam* to the W., and that of *Jambukeswar* to the E. Owing to dense groves the temples are not very distinctly seen. Beyond to the N. in the far distance rises a long line of hills. To the N.W. is the *Tale Malai* range, the greatest height of which is 1800 ft.; while due N. of the Fort Rock are the *Kale Malai* (*Kolli-malai*) Hills, which attain 4000 ft.; and E. of these are the *Pachai Malais* (*Green Hills*), which in some parts rise to 2300 ft.

The old Cantonment of Warriors (*Uraiyur*), on the site of the Chola capital, lies to the W. of the city. It consists of a square fringed by European bungalows; and is used as the headquarters of the South Indian Railway, whose locomotive carriage and wagon works are near *Golden Rock*. A curious custom prevails in Trichinopoly whereby the *Kavalgaran*, or watchman, whom every householder employs, is taken from the thief caste.¹

The most important local *Industries* are weaving and tobacco and cigar making. The cigars are well known, though the so-called Trichinopoly cheroots come for the most part from Dindigal. The silver and gold manufactures are famous, the local gold and silver smiths being very successful in their filigree work.

¹ J. C. Molony, *A Book of South India* (Methuen, 1926, p. 38).

About 2 m. N. from the Rock, on an island, 17 m. long and $1\frac{1}{2}$ m. broad, formed by a bifurcation of the River **Cauvery**, is the town of **Sri Rangam**, with its Vaishnavite temples, a place of Hindu pilgrimage to be ranked with Benares and Rameswaram. A bridge of thirty-two arches joins the mainland to the island on the S. An inscription on a slab let into the parapet commemorates the defence of Trichinopoly by Stringer Lawrence and the two actions fought by him on 26th June and 21st September 1753, "which mainly contributed to lay the foundations of the British Empire in India."

The Great Temple of Raghunathaswami at Sri Rangam is about 1 m. N.W. of the bridge. The entrance is on the S. side of the temple, by a grand gateway, 48 ft. high, which appears to have been built as the base of a great gopuram. The sides of the passage are lined with pilasters and ornamented. The passage is about 100 ft. long, and the inner height, exclusive of the roof, is 43 ft. Vast monoliths have been used as uprights in the construction, some of them over 40 ft. high. The stones on the roof, laid horizontally, are also huge. The stone on the inside of the arch is 29 ft. 7 in. long, 4 ft. 5 in. broad, and about 8 ft. thick. From the terrace at the top of the gateway is seen the vast outer wall which encloses the gardens as well as the buildings of this the largest temple in India. The temple is composed of seven rectangular enclosures; the outermost, which measures 2475 ft. by 2880 ft., contains a bazar. Within this is a second wall 20 ft. high, enclosing the dwellings of the Brahmans in the service of the temple. The general design is marred by the fact that the buildings diminish in size and importance from the exterior to

the innermost enclosure. "If its principle of design could be reversed, it would be one of the finest temples in the S. of India."¹ This opinion, which is that of Fergusson, will be generally shared, but others have taken the view that the innermost shrine should naturally be the smallest in size. There are two great gopurams on the E. side, two smaller on the W., and three of a medium height on the S. Beyond the incomplete gopuram the road passes under a small *mandapam*, and then through a gopuram about 60 ft. high. The decoration of the gopurams is all painted, and the ceiling of this one represents the Varaha, or Boar Incarnation, of Vishnu, as well as other Avatars with multitudes of human beings adorning them. A second *mandapam* is then passed, and a second and third gopuram. Hard by is another enclosing wall, which surrounds the more sacred part, or real temple, beyond which is the vimana, or adytum, which none but high-caste Hindus are allowed to enter. At a third *mandapam* the jewels of the temple may be examined.

In the court round the central enclosure is the so-called *Hall of 1000 Pillars*. The actual number is about 940. (Fergusson counted 960, but the number is now much reduced.) They are granite monoliths 18 ft. high, with pediments, slightly carved to the height of 3 ft., and they all have the plantain bracket at the top. The pillars of the front row looking N. represent men on rearing horses spearing tigers, the horses' feet being supported by the shields of men on foot beside them. The carved horses spring out from the pillars, all being carved from one block. The great gopuram on the N. is 152 ft. high. In the floor of the passage under

¹ See 1, 368 of Fergusson's *Ind. Arch.* where an illustration and a description of the temples will be found.

this gopuram is a stone with a Kanarese inscription. Fergusson was of opinion that the buildings were under construction from the 10th century to 1600 A.D.¹

Temple of Jambukeswar.—In the S. of India temples are often found in pairs. If there is one dedicated to Vishnu, there will be one dedicated to Siva. So here, at about 1½ m. E. of the Great Temple of Sri Rangam, is a smaller one sacred to Jambukeswar, or Siva, from *jambuka*, "rose-apple," and *iswar*, "lord," or Lord of India, Jambu being a division of the world—"India."

The Jambukeswar Temple has been restored. It has three courts, and is very much smaller than Sri Rangam. The plan of the building is more artistic, and the main corridor and proportions are fine. On the right of the entrance is an upright stone 4 ft. high, with a long Tamil inscription. The first gopuram is also the gateway of entrance. The ceiling is painted with flowers of the lotus. Within the inner court is a remarkable *Teppa Kulam*, or tank, of spring water, with a pavilion in the centre. Round the S., the E., and the N. sides, run a corridor of two storeys supported by pillars. Beyond this is a second gopuram, and a third which forms part of the wall enclosing the adytum. Thence a broad corridor leads to the *vimana*. On the whole, this is a very fine temple, and well worth a visit. It is, no doubt, older than that of Sri Rangam—probably about 1600 A.D.

The **Anikuts**, or dams.—About 9 m. to the W. of Trichinopoly the Cauvery separates into two branches, which enclose the island, the N. branch being called the *Coleroon* or *Kolidun*, and the S. the Cauvery. A dam was constructed across the Coleroon in

1836 to prevent the river deserting the S. arm, from which a number of branches irrigate Tanjore, the chief one being called the Vennar, which falls into the sea 20 m. S. of the spot where the Coleroon disembogues. The dam or Anikut, which was designed by Sir Arthur Cotton, R.E., consists of three parts, being broken by two islands. It is a brick wall 7 ft. high and 6 ft. thick, capped with stone, and is based on two rows of wells sunk 9 ft. below the river's bed. It is defended by an apron of cut stone from 21 ft. to 40 ft. broad, and has twenty-four sluices, which help to scour the bed. It controls the irrigation of about 600,000 acres. About 9 m. E. of Trichinopoly is the Grand Anikut, an ancient work, and below that is the Lower Anikut, also built in 1836.

One of the most interesting irrigation features of the District is the *Korambu* system. Above the Anikuts (i.e., W. of them) irrigation channels take off flush with the river. They get a supply when the river is full. But when the river goes down *Korambus* are built—i.e., temporary dams of brushwood, piles, earth, etc.—to catch up some water and divert it into the channels. If a fresh comes they are swept away and have to be put up again. They do not go *across* the river, nor do they follow a straight line; they are accommodated to the needs of the moment.

306 m. from Madras (Egmore), **Dindigal** station (R.), a municipal town (30,992 inhabitants) in the Madura Collectorate. It has a considerable tobacco manufacture. There are several tanneries, and a large cotton ginning and pressing factory under European management. The great rock on which the fort is built forms a conspicuous object; its summit is 1223 ft. above sea-level, 280 ft. above the plain. Its inaccessible sides were strongly fortified under

¹ *Ind. Arch.*, 1, 373.

the first **Nayakkan Kings** of **Madura**, and for a long time it was the **W. key** of the Province of **Madura**. In 1757, **Dindigal** came into the possession of **Hyder 'Ali**, who used it as a base for the invasion of **Madura** and who disposed of his prisoners by throwing them from the top of the rock. The place was taken by the British from **Tipu Sultan** in 1781, restored to him in 1783, and finally ceded in 1792.

A branch line was opened in September 1928 from **Dindigal** to (75 m.) **Pollachi**, where it connects with the **Coimbatore District Board Ry.** to (25 m.) **Podanur junction** (p. 640), on the **S.I.R.** broad-gauge line from **Madras** to **Mangalore** (Route 35).

Midway between **Dindigal** and **Pollachi** on this line is the famous hill shrine at **Palni**. The temple here is dedicated to **Subrahmanya**, an aspect of **Siva**, and stands on a picturesque hill, which is a continuation of the **Kodaikanal range**; the image, known as **Palni Andavar**, represents the god as an infant. The two hillocks, **Sakti** and **Siva**, are said to have been given to the Sage **Agastya** to be placed in the south of **India**; **Idambasura**, a demon, to whom the Sage entrusted the task, carried them on his shoulders in a **Kavadi**, or pair of baskets, and they dropped at this spot. Many of the devotees who throng the road and who mostly perform the pilgrimage under a vow either of silence or of fasting, may be seen with **Kavadis** slung on a pole across their shoulders; these are filled with milk or sugar and taken round the temple on arrival. The women who visit **Palni** invariably sacrifice their hair; and so large is the quantity left at the temple, that it is sold annually to a contractor for several thousand rupees.

Between **Udaimalpet**, the next important station, and **Pollachi**,

the line skirts a fertile black cotton tract where some of the best cotton in the **Madras Presidency** is grown. To the S. are extensive sugar-cane plantations. On the lower slopes of the **Palni hills**, tea, coffee, and cardamoms are grown.

Pollachi is situated opposite the break in the **Western Ghats**, which is known as the **Pal Ghat Gap** (p. 645), and which forms the entrance to the **Malabar coast**. A large market is held here weekly.

320 m. **Ammayanayakkanur station**, or **Kodaikanal Road**.★ The distance to **Kodaikanal** (pop. 4283) is 50 m. by road. Motor services run in the season. (Rates vary from Rs.5 to Rs.4 a seat.) Petrol available at **Kodaikanal Road** and also at the **Co-operative Stores**, **Kodaikanal**. This station (hotel and boarding-houses), which enjoys a growing popularity, is 7209 ft. above sea-level, and its climate is more even than that of **Ootacamund**. The scenery round it is picturesque, and there are places where the views of the low country and the **Anamalai Hills** to the W. are beautiful past description. Game (both big and small) is obtainable on the hills, but is not easy to get. Nutmeg, cinnamon, and pepper-vine grow wild. Orange-trees, lime-trees, citron, and sago are cultivated. The observatory, removed from **Madras** in 1899, stands 7700 ft. above sea-level in N. lat. 10° 13' 50", long. 5 h. 9 m. 52 s. E.

Kodaikanal Road is also the station for the **Travancore hills**, and for the **Periyar lake**, 80 m. The chief places in the **Travancore hills** are **Vandiperiyar**, **Peermaid** (**Peermedu**) and **Kottayam**; which can be reached by way of **Thekkady** (**Periyar Lake**). Motor-bus service from **Kodaikanal Road** to (62 m.) **Cumbum**; from **Cumbum** to, (14 m.) **Kumili**, there is another bus service (enquiry should be made whether this is in operation),

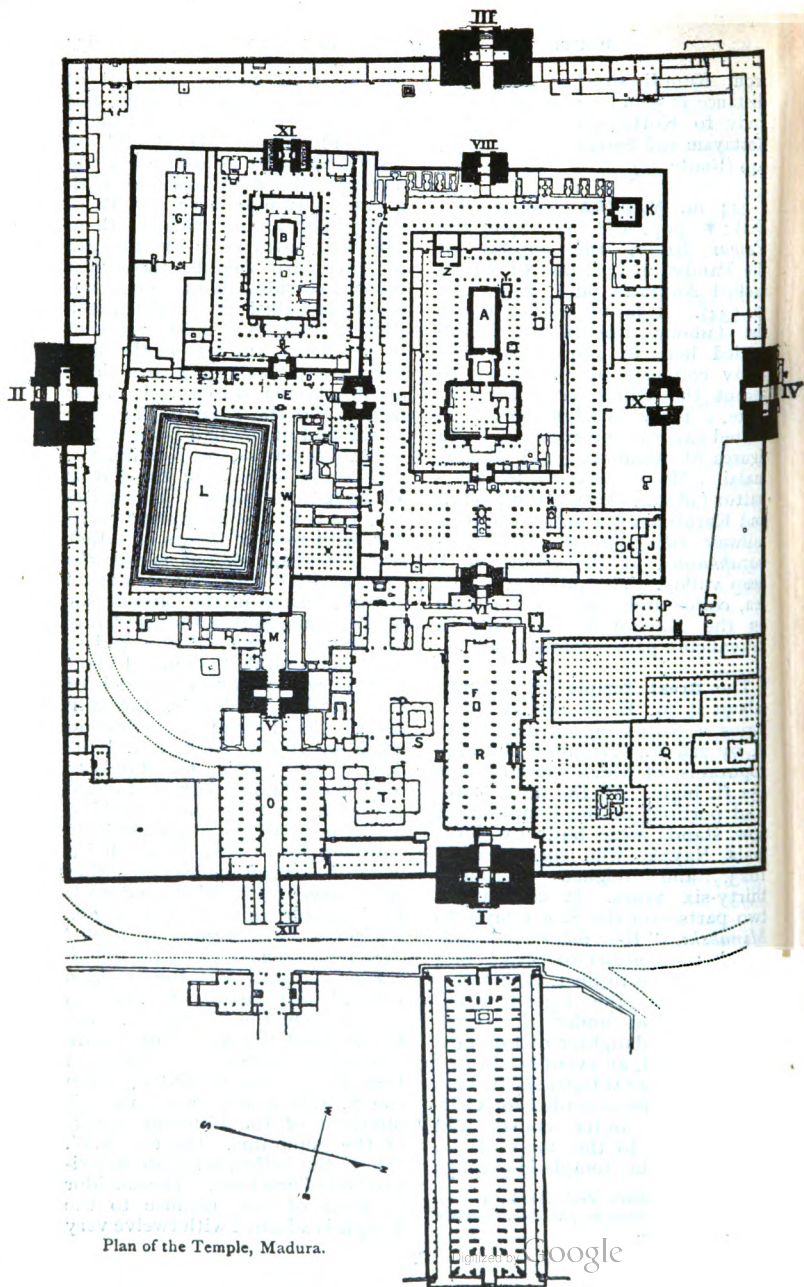
from Kumili to Thekkady the distance is 3 m., and from Thekkady to Kottayam 71 m. For **Kottayam** and **Periyar**, see pp. 648, 649 (Route 35).

344 m. **MADURA** station (R., D.B.; ★ pop. 138,894), upon the *Vaigai* River, the capital of the Pandya Kings, one of whom sacked Anuradhapura, 1001 A.D. (p. 734). A Jesuit mission under the famous Robert de Nobili settled here in 1606 and made many converts by professing to accept the Hindu conception of caste. From Madura may be visited caverns and rock-cut Jaina figures at Anaimalai and Alagar-malai. Motor services to Tirupattur (38 m.), Devacottah (60 m.) and Karaikudi (52 m.). A branch railway runs (56 m.) to *Bodinayakkanur*, at the mouth of a deep valley. The produce of the tea, coffee and cardamom estates on the Kanam Devan hills in Travancore passes through here.

The **Great Temple**¹ at Madura (about $\frac{1}{2}$ m. E. of the ry. stn.) forms a parallelogram about 847 ft. by 729 ft., surrounded by nine gopurams, of which the largest is 152 ft. high. All the most beautiful portions of the temple as it now stands were built by Tirumala Nayak, who succeeded in 1623, and reigned gloriously thirty-six years. It consists of two parts—on the S. a temple to *Minakshi*, "the fish-eyed goddess," the consort of Siva; and on the N. one to Siva, here called *Sundareswar*, the legend being that the god under this form married the daughter of the local Pandya Chief, an event celebrated by the annual car festival. Owing to the facilities accorded for visiting all the outer courts and corridors up to the doors of the two adyta, this temple is perhaps

the most interesting to visit of all the Hindu shrines of India, and gives one the most complete idea of Hindu ritual. It should be visited at night as well as in the daytime, the dark corridors with a lamp gleaming here and there being peculiarly wicked then. The only entrance is by the gate of Minakshi's Temple, through a painted corridor about 30 ft. long, which is called the Hall of the Eight Saktis, from eight statues of that goddess which form the supports of the roof on either side; in it various dealers ply their trade. On the right of the gate at the end of the hall is an image of Subrahmanya, or Kartikkeya, the Hindu Mars. On the left is an image of Ganesh. This gateway leads to a second stone corridor, with rows of pillars on either side, called the *Minakshi Nayaka Mandapam*, built by Minakshi Nayak, Diwan of the predecessor of Tirumala, where the elephants are kept. Some of the pillars have for capitals the curved plantain-flower bracket, but much of the detail is hidden by the stall shops. At the end of the second corridor, 166 ft. long, is a large door of brass, which has stands to hold many lamps that are lighted at night. A third dark corridor, under a small gopuram, ends in one broader, with more light, which has three figures on either side, carved with spirit, and leads to a quadrangle with a *Teppa Kulam*. This tank is called *Swarnapushpakarini*, or *Pottamarai*, "Tank of the Golden Lilies." All round it runs an arcade. On the N. and E. sides the walls of this are painted with the representations of the most famous pagodas in India; from the S. side a very good view is obtained of the different towers of the gopurams. On the N.W. side is the belfry, with an American bell of fine tone. The corridor in front of the entrance to the temple is adorned with twelve very

¹ See Fergusson's *Ind. Arch.*, I, 391. Higginbothams, Madras, publish a *Tourists' Guide* to Madura.



Plan of the Temple, Madura.

PLAN OF THE MADURA TEMPLE.

KEY TO THE PLAN.

- A Shrine of God Sundareswar.
- AA Pudu mandapam (Tirumala's Choultry).
- B Shrine of Goddess Minākshī-devī.
- C Small shrine of Ganesa.
- D Small shrine of Subrahmanya.
- E Vēdi or Altar.
- F Nandi Pavilion.
- G Javandīvara mandapam.
- H Navagraha or nine planets.
- I Large Ganesa.
- JJ Shrines of Natesvar.
- K Poet's College.
- L Tank of Golden Lilies.
- M Mudali Pillai mandapam.
- O Ashta Sakti hall.
- P 16 pillar mandapam.
- Q Thousand pillar mandapam.
- R Viravasantarāya mandapam.
- S Katyāna Sundara mandapam.
- T Servaikaran mandapam.
- U Lingam.
- W Chitra mandapam.
- Y Ellamvatta-siddha.
- Z Madura Nāyaka temple.
- I-IV Four outer Gopurams.
- V Tiruvachi Gopuram.
- VI, VIII, IX Three Gopurams of the second Prakāra.
- X, XI, Gates to the Minākshī prakāram.
- VII, Gate between the temples.
- XII, Ashta-Sakti mandapam.

spirited figures, which form pillars on either side, six of them being the Yali, a name given to a strange monster which is the conventional lion of S. India, sometimes represented with a long snout or proboscis. Between every two of them is a figure of one of the five Pandava brothers (p. lxii of the Introduction). First on the right is Yudhishtir, and opposite to him on the left is Arjun with his famous bow. Then comes Sahadeva on the right, and Nakula on the left. Then follows Bhima on the right with his club, and opposite to him, on the left, is the shrine of the goddess and the figure of a Dwarapalagam. From here a gopuram leads from the Minakshi Temple into that of Sundareswar, surrounded by a fine corridor. On the S. side of it is a Nandi hall, and eight steps lead into the *Aruvati Muvar, the Temple of the Saivite Saints*, in which are a very large number of statues of Hindu saints and gods. N.E. of the groups of statues are the chambers where the Vahanas, or vehicles, of Minakshi and Sundareswar are kept. They are plated with gold. The jewel-house adjoining will be opened for a fee of Rs.15. There are two golden *palkis*, or litters, plated with gold, and two with rods to support canopies; also vehicles plated with silver, such as a *Hamsa*, or goose, a *Nandi*, or bull. Among other treasures is a pair of golden stirrups presented by Mr Rous Peter, who was Collector of Madura from 1812 to 1828, and lived on a scale of regal magnificence.

In the N.E. corner is the most striking feature of the temple—the *Sahasrasthambha Mandapam*, or **Hall of 1000 Pillars**. There are in fact 997, but many are hid from view, as the intervals between them have been bricked up to form granaries to the temple. "There is a small shrine dedicated

to the god Sabhapati, which occupies the space of fifteen columns, so the real number is only 985; but it is not their number but their marvellous elaboration that makes it the wonder of the place, and renders it in some respects more remarkable than the Choultry (see below) about which so much has been said and written" (Ferguson, *Ind. Arch.*, I, 392). This hall, whose sculptures surpass those of any other hall of its class, was built c. 1560 A.D. by Arianayakam Mudali, Minister of the Founder of the dynasty of the Nayakkans. He is represented on the left of the entrance sitting gracefully on a rearing horse. In the row behind him are some spirited figures of men and women, or male and female deities dancing.

Opposite the great gopuram is the *Pudhu Mandapam*, or New Gallery, known as **Tirumala's Choultry**, and built by him for the presiding deity of the place, Sundareswar, who paid him a visit of ten days annually. It is also called the *Vasanta Mandapam*, as the visit was in the spring. If this building had been finished, it would have surpassed in magnificence all the other buildings of this monarch; and as the date of its construction is known (1623-45), it forms a fixed point in the chronology of the style. The hall is 333 ft. long and 105 ft. broad, and has four rows of pillars supporting a flat roof, and on either side of the centre corridor five pillars represent ten of the Nayakkan dynasty. Tirumala is distinguished by having a canopy over him and two figures at his back; the figure on the left is his wife, the Princess of Tanjore. On the left of the doorway is a singular group, representing one of the Nayaks shooting a wild boar and sows, according to the legend, which says that Siva commiserated the litter of little pigs, took them up in his arms, and, assuming the shape of the

sow, suckled them. A portly figure, either that of Siva or the Nayak, is seen holding up the dozen little pigs. The hall is said to have cost a million sterling.

The *Great Raya Gopuram* is on the E. side of the hall; had it been completed in accordance with its foundations, it would have been by far the loftiest gopuram in all S. India.

$\frac{1}{2}$ m. from the temple to the S.E. is the **Palace of Tirumala Nayak**. The building, which looks modern, and has pillars of rough granite cased with beautiful chunam or cement supporting scalloped arches, has been restored, and is now utilised for public offices. The main entrance—a granite portico built in honour of Lord Napier and Ettrick (Governor of Madras, 1866-72), who first ordered the restoration—is on the E. side of the building. At each corner of the E. face of the Palace is a low tower. The Napier Gateway gives access to a quadrangle 252 ft. by 151 ft. On the E., N., and S. sides of this quadrangle is a corridor, the roof supported by arches resting on granite pillars. On the W. and opposite the main entrance stands the "Swarga Vilasam," or Celestial Pavilion, formerly the throne-room of the Palace, now used as the Judge's Court. It is an arcaded octagon, covered by a dome 60 ft. in diameter and 70 ft. high. To the N. of this is the splendid hall, the two corresponding with the Diwan-i-Khas and Diwan-i-'Am of Muhammadan Palaces. The hall is 140 ft. long by 70 ft. wide, and its height to the centre of the roof is 70 ft.; but, what is more important than its dimensions, it possesses all the structural propriety and character of a Gothic building (see Fergusson's *Ind. Arch.*, I, 412-414). Fine as the hall is, the illustration in Fergusson's book, taken from Daniell's drawing (made in 1792), exaggerates

the proportions and beauty of it. This old Palace now forms one of the finest public buildings in India.

The *English Church*, designed by Mr Chisholm, C.E., and built at the expense of Mr Fischer, a former well-known resident at Madura, stands in an open space in the middle of the town S.W. of the Great Temple.

On the N. side of the River Vaigai, N. of the city, and about 1 m. from the bridge (recently completed), is a curious building called the *Tamkam*, built by Tirumala for exhibiting fights between wild beasts and gladiators. It is now the Collector's residence. N. again is the Civil Station. 3 m. E. of the station is the fine Vandiyur *Teppa Kulam* (or sacred tank, literally meaning the raft tank, with reference to the raft on which the god is taken from the great temple every year), enclosed by a granite parapet (1000 ft. sq.), and with a pretty temple in the middle. On the way is passed a garden with a very fine specimen of the *Ficus indica*. The main stem has been much mutilated, but is still 70 ft. in circumference. The ground shaded by this tree has a diameter of 180 ft. in every direction.

Madura to Tuticorin, Tinnevely, Quilon and Trivandrum.

From Madura a branch line runs S. to Maniyachi (for Tuticorin), Tinnevely, Quilon, and Trivandrum.

401 m. from Madras **Koilpatti** station. The beautiful rock-cut Jain figures at Kalugumalai are 13 m. from Koilpatti, and are worth visiting.

425 m. **Maniyachi** junction for Tuticorin (for line to Tinnevely, Quilon and Trivandrum, see pp. 678-680).

443 m. Tuticorin station (Tuttukudi) * (Railway R. and D.B.). Lat. $8^{\circ} 48'$, long. $78^{\circ} 11'$. A municipal and commercial town, exporting quantities of cotton, coffee, chillies, tea, cattle; value in 1926-27 of exports, 5.74 lakhs, and of imports, 4.35 lakhs (pop. 44,522). Steamers leave regularly for Colombo (16 hrs.). First-class fare with messing, Rs.21. The anchorage is 6 m. to 7 m. from the shore. Passengers are conveyed to and from the steamers of the B.I.S.N. Company by launches. Works are in progress which are intended to convert the roadstead into a deep-water harbour. But the journey from Madras to Colombo is now made by way of Dhanushkodi and Talaimannar (p. 680).

The S.P.G. have a mission-house here. The D.B. is near the shore; furnished; meals at the Ry. R. room, 1 mile.

Tuticorin was originally a Portuguese settlement, founded about 1540. In 1658 it was captured by the Dutch, and in 1782 by the British. It was restored to the Dutch in 1785, and again taken by the British in 1795. During the Poligar War of 1801 it was held for a short time by the Poligar of Panchalamkurichi, and was ceded to the Dutch in 1818. It was finally handed over to the English in 1825.

The old Dutch cemetery, containing several tombstones on which are carved armorial bearings and raised inscriptions, is worthy of a visit. "Our Lady of the Snows," the principal Roman Catholic Church, was built by the Portuguese.

Maniyachi to Tinnevely, Quilon and Trivandrum.

18 m. from Maniyachi is **Tinnevely Bridge** and 2 m. farther **Tinnevely Town** (Tirunelveli) (pop. 53,783), on the left bank of the Tambrapurni River, and $1\frac{1}{2}$ m. from it. On the other side is Palamcottā (pop. 46,643; Chris-

tians, 3193). A bridge of eleven arches of 60 ft. span each connects the two Municipalities.

Tinnevely is the most Christianised District in India. The S.P.G. and the C.M.S., established 1820, have important stations at the headquarters and at Palamcottā, as have also the Jesuits. It was here that St Francis Xavier (1506-1552) began his preaching in India. This district has a long list of D.Bs. and R.Hs.

The *Temple* at Tinnevely, though, as Fergusson says (*Ind. Arch.*, 1, 392), "neither among the largest nor the most splendid of S. India, has the advantage of having been built on one plan and at one time, without subsequent alteration or change." It is, like the temple at Madura, divided into two parts, of which the S. half is dedicated to Parvati, the consort of Siva, and the N. to Siva himself. There are three gateways, or gopurams, to either half, those on the E. being the principal, and having porches outside them. In front on entering is an internal porch of large dimensions, on the right of which is a *Teppa Kulam*, and on the left a thousand-pillared hall, which runs nearly the whole breadth of the enclosure, and is 63 ft. broad. There are a hundred rows of pillars ten deep. The temple is deserving of a visit.

Palamcottā (D.B. furnished), is $3\frac{1}{2}$ m. E. of Tinnevely. The old fort has been demolished.

Between the bridge over the Tambrapurni and the fort stands the Church of the C.M.S., the spire of which is 110 ft. high. The C.M.S. have several schools here.

From Palamcottā to Cape Comorin (D.B.) is a distance of about 50 m. along a fair unmetalled road. There is a regular motor-service to Nagarcoil, 8 m. from Cape Comorin.

Cape Comorin (D.B.) (lat. $8^{\circ} 4'$ long. $77^{\circ} 35'$)—the *κορυφαία ακρόν*

of Ptolemy and "Comori" of Marco Polo—is named from the temple of Kumari (the Virgin, an attribute of Durga) built at the Southernmost point of the Indian peninsula. The temple and village, standing on rocks, and the long sandy promontory, backed by groves of palms, are very picturesque; and there are considerable remains of fortifications a few miles N. of the temple. The old Residency is now a State guest-house.

To the E. from Tinnevely a short line connects with Tiruchendur (D.B.), which lies 20 m. S. of Tuticorin, on the coast. Here there is a large and important temple dedicated to Subrahmanya, the god of war, and second son of Siva. The temple contains some excellent sculpture and several inscriptions. There is also a cave with rock-cut sculptures (on the list of preserved monuments). From Tiruchendur a light ry. runs to Kulasekharapatnam and Tissianvillai. A mile or two S. of Kulasekharapatnam is the prosperous Roman Catholic village of Manapad, lying under the shelter of a headland. The fine church stands in a well-kept square. St Francis Xavier is said to have lived in a cave on the headland. Close to Tissianvillai is the large Protestant settlement of Idayan-gudi, founded by Bishop Caldwell, who is buried there.

The railway turns W. from Tinnevely, and runs to

22 m. **Ambasamudram**; the nearest station for **Papanasham** (*papa*, "sin," *nasham*, "effacing"), 29 m. by road from Palamcotta. Here, near a temple, the Tambrapurni River takes its last fall from the hills to the level country. The height is only 80 ft., but the body of water is greater than at Kuttalam.

45 m. **Tenkasi**; 3 m. from **Kuttalam** (Courtallam) (D.B.

motors available; resorted to by European residents and even more by Indians of position, from Madras and other distant places. It is not very elevated, but the S.W. winds pass over it through a chasm in the W. ghats, and bring with them coolness and moisture, so that the temperature of this favoured spot is from 10° to 15° lower than that of the plains beyond, and it is particularly enjoyable in June, July, and August. Comfortable bungalows may be rented (visitors should address the Collector at Tinnevely regarding accommodation). Close to the bungalows there are three falls in the channel of the Chittar River, the lowest cataract having a plunge of 200 ft., but being broken midway. The average temperature of the water is from 72° to 75° F., and invalids derive great benefit from bathing in it. The bathing-place is under a fine shelving rock, which affords the most delightful shower-bath possible. The scenery is strikingly picturesque, being a happy mixture of bold rocks and umbrageous woods. Kuttalam is 38 m. N.W. of Tinnevely by road.

68 m. from Maniyachi) **Shen-cottah** (D.B.). The line passes through a dip in the ghats to Punalur (D.B.) (99 m.), and so to

127 m. **Quilon** (D.B.)—the Koilum of Marco Polo—on the W. coast in the Travancore State.

2 m. from Quilon is **Tangasseri**, a British possession in the Travancore State, 96 acres in extent. There are two cemeteries on the headland near the lighthouse. A handsome belfry stands in the centre of the Protestant graveyard. Fort Thomas, of which the greater part has fallen into the sea, was built by the Portuguese in 1503. Between Quilon and Trivandrum **Attungal** is passed. This was the capital of the Tambur-

ettis, who reigned as queens of Travancore until 1758.

On the sea-coast, 20 m. S. of Quilon, is the old English factory of **Anjengo**, remarkable as the birthplace (1744) of Mrs Draper, Laurence Sterne's "Eliza," and of Robert Orme, the historian (1728). The surf is worth seeing here. There is a Portuguese church, a massive laterite fort, and an English cemetery, in which the earliest tomb dates back to 1704.

164 m. from Maniyachi, **Trivandrum**, * (pop. 72,784; D.B.), the capital of Travancore, lying 44 m. by road S.E. of Quilon, is the headquarters of the Agent to the Governor-General, Madras States. No less than 25 per cent. of the population of the State is Christian, 226,000 being members of the Jacobite Syrian Church. The Travancore State, the ancient Kerala, has an area of 7625 sq. m., with a pop. of 4,006,062 and an annual revenue of nearly 2½ crores. H.H. Sultan Maharaja Rama Varma succeeded in 1924. The ancient custom of descent through the female line still prevails, both in the royal family and in the Nair (Malayali Sudra) community.¹ The fort at Trivandrum (Tiruvananthapuram) contains, besides several Palaces, an old temple of Vishnu, known as the Padmanabha. The palace in the Fort may generally be visited on application to the Private Secretary to the Maharaja. There

¹ The other great centre of "mother right" in India must be sought among the Garos (p. 497) and the Khasis (p. 499) in the Assam hills. Ovington, in his *Voyage to Surat in the Year 1689*, alludes to the Malabar custom: "The sister's sons, as in Africa, and not the King's, are heirs to the crown, because the blood royal runs certainly in their veins." For full information regarding this and other interesting customs which prevail in Malabar, Mr J. A. Thorne's notes to the second volume of *The Book of Duarte Barbosa* (Hakluyt Society, 1921) should be consulted.

is an observatory at the capital, and a good museum and a fine zoological garden. His Highness the Maharaja maintains a nine-hole golf-course. The attack in 1789 by Tipu Sultan, on the Travancore lines from the island of Vypin, N. of British Cochin, to the foot of the ghats, led to the great Mysore War of 1789-92.

For the journey through the Malabar "backwaters" from Ernakulam (the capital of the Cochin State) to Quilon, and thence by rail to Trivandrum, see Route 35 (p. 647).

Madura to Rameswaram and Dhanushkodi.

From Madura the Ceylon mail route proceeds S.E. to (418 m. from Madras) **Ramnad**, and (435 m.) Mandapam (R., R.H.; Health examination by Ceylon Medical Officer). A railway embankment and causeway across the Pamban channel carry the line to (439 m.) **Pamban** on the island of Rameswaram (18 m. long). The line runs on from Pamban to, 441 m. Rameswaram Road, and 11 m. farther to **Dhanushkodi** (456 m. from Madras). From here a steamer in about 2 hours crosses to **Talaimannar** in Ceylon, 22 m. distant, from which Colombo is 209 m. (p. 760). The Customs' examination is held on the steamer. There is an official money-changer on board, and if passengers have not already provided themselves with Ceylon currency notes, they should avail themselves of his services. The boat train from Madras arrives at Dhanushkodi in the afternoon, and the journey from Talaimannar Pier to Colombo Fort station takes twelve hours. Sleeping accommodation and a restaurant car are provided.

A short branch line runs from Pamban to **Rameswaram** (7 m.). Near the ry. stn. is a building containing two long tombs, placed

side by side, which are said to be those of Cain and Abel. They are in the care of the Muhammadan community. There is no refreshment-room at Rameswaram station, and those who desire to visit the Temple should make the necessary arrangements at Mandapam.

A train from Madras (Egmore) known as the Rameswaram Express, which leaves Tanjore (p. 663) at 8 P.M. and Madura (p. 673) at 3 A.M., arrives at Rameswaram station, *via* Mandapam and Pamban, at 7.50 A.M. (intending travellers should verify these timings). By taking this train, it is possible, on the way to Colombo, to spend about four or five hours at Rameswaram and catch the Ceylon boat train at Pamban Junction; but it must be borne in mind that passengers for Ceylon are not allowed to land at Talaimannar Pier without a pass from the Ceylon Medical Officer at Mandapam.

The Temple of **Rameswaram** is one of the most venerated Hindu shrines in India, having been founded, according to tradition, by Rama himself, and therefore associated with Rama's journey to Ceylon in search of Sita, as related in the *Ramayana* (p. lxiii, Introduction). For centuries it has been the object of pilgrimages from all parts of India. It is to their control of the passage from the mainland that the Rajas of Ramnad owe their hereditary title of Setupati, "Lord of the Causeway." Statues of the Rajas are sculptured on the pillars of the *mandapams* and courtyard (*prakarams*).

The island is to a great extent covered with *babul* (*Acacia arabica*) trees and by quaint umbrella-trees. It is inhabited principally by Brahmans, supported by the profits derived from the temples and by gifts made by pilgrims for purificating ceremonies. The Brahmans who live in Rames-

waram depend largely upon the income they derive from the pilgrims, to whom they act as guides and priests.

The great Temple stands on rising ground above a fresh-water lake, about 3 m. in circumference, in the N. part of the island. It is built in a quadrangular enclosure 657 ft. broad by about 1000 ft. long, and is entered by a gateway 100 ft. high. With its majestic towers, its vast colonnades, and its walls encrusted with carved work and statuary, it is a grand example of the Dravidian style. The best and oldest portion is built of a dark, hard limestone, to which there is nothing similar in the rest of the building. Local tradition asserts that this part was erected by the Vara Raja Sekkarar, of Kandy, with stone cut and polished in Ceylon, and that its cost was defrayed by the sea-port dues of all the coast towns during the year it was building. The massiveness of the workmanship (slabs 40 ft. long being used in the doorways and ceilings), and the wonderful pillared halls which surround the inner shrine are noticeable. The temple consists of three *prakarams*. Excepting the *mulasthanam*, or the innermost shrine, the other portions of the first and second *prakarams* are in the course of renovation. The old limestone is replaced by black granite, and, unlike the old structure, ample provision is made for free light and air. It may take several years before the work is completed. The corridors of the outer or third *prakaram* will remain untouched; and therefore when the work of renovation of the inner *prakarams* is completed, the temple will exhibit the old and the modern style of architecture side by side, and in contrast.

Fergusson says:¹ "If it were proposed to select one temple which should exhibit all the

¹ *Ind. Arch.*, 1, 380.

beauties of the Dravidian style in their greatest perfection, and at the same time exemplify all its characteristic defects of design, the choice would almost inevitably fall upon that of Ramesvaram. In no other temple has the same amount of patient industry been exhibited as here; and in none, unfortunately, has that labour been so thrown away for want of a design appropriate to its display. . . . While the temple at Tanjore produces an effect greater than is due to its mass or detail, this one, with double its dimensions and ten times its elaboration, produces no effect externally, and internally can only be seen in detail, so that the parts hardly in any instance aid one another in producing the effect aimed at." It remains to be seen to what extent the defects of design will be remedied by the work of renovation now in progress.

"The glory of this temple resides in its corridors. These extend to nearly 4000 ft. in length. The breadth varies from 17 ft. to 21 ft. of free floor space, and their height is apparently about 30 ft. from the floor to the centre of the roof. Each pillar or pier is compound, 12 ft. in height, standing on a platform 5 ft. from the floor, and richer and more elaborate in design than those of the Parvati porch at Chidam-

baram (p. 660), and are certainly more modern in date." But, unfortunately, several parts of these splendid corridors have been blocked up to locate the *vahanams*, or vehicles, the temple offices, the records, and for such other purposes. The glory is thus partly lost. The painting on the ceilings and the colonnades are either fading away or have faded altogether. It is understood that the present trustee of the temple has in view the restoration of the corridors to their full and ancient glory.

As the corridors run for the most part round open spaces, and have light admitted to them through the back walls, they have none of the mysterious half-light of those of Madura, and will perhaps strike some visitors as less impressive.

The temple, its ceremonies, and its attendant Brahmans are maintained from the revenue of seventy-two villages, yielding an annual income of about £7000, granted for the most part by former Rajas of the Ramnad *zamindari*, and by others, and from the offerings of pilgrims and devotees, and from other income amounting to Rs.3000. The *lingam*, which is supposed to have been placed here by Rama, is daily washed with Ganges water, which is afterwards sold, being bought by pilgrims; a stock of it is always kept ready.

BURMA

INTRODUCTION

(The portion of the Handbook relating to Burma was originally written by the late Sir E. S. Symes, K.C.I.E. It has been revised for the present edition by Prof. D. G. E. Hall, of University College, Rangoon.)

Means of Access.—The quickest route to Burma is by Marseilles to Bombay, rail to Calcutta or Madras, and thence steamer to Rangoon. The B.I.S.N. Co.'s steamers leave Calcutta for Rangoon three times a week (Sundays, Tuesdays and Fridays) and Madras for Rangoon every Friday; the former voyage takes three days, the latter 90 hours. On the return journey the steamer leaves Rangoon for Calcutta on Thursday, Tuesday and Saturday, and for Madras on Friday. Through tickets are issued by the P. and O. Co. for Rangoon *via* Bombay and Calcutta, and thence by B.I.S.N. Co. steamer. There is also a supplementary service by B.I.S.N. Co. steamer from Calcutta to Rangoon *via* Chittagong (p. 495), Akyab and Moulmein. The Apcar Line steamers of the B.I.S.N. Co., which run from Calcutta to the Straits Ports and Shanghai, call at Rangoon.

Two steamship lines offer passenger service by the direct sea route to Burma. A favourite route is by the Bibby line, which despatches steamers to Rangoon from Liverpool every alternate Friday. The Henderson Line (133 St Vincent Street, Glasgow) also maintains a fortnightly service from Liverpool to Rangoon. The steamers of both lines are large and well-found in every respect, and perform the journey from Liverpool to Rangoon in about 30 days (see p. xlix). They call at Marseilles and Port Said, and if the traveller proceeds to Marseilles by train he can complete the journey to Rangoon in 23 days. The Bibby boats call at Colombo.

General Hints.—Letters of introduction will be useful. Except at a few places, such as Rangoon, Moulmein, and Mandalay, there are no hotels, and the traveller, when he quits line of railway or Irrawaddy steamer, must get leave from the Deputy Commissioner of the district to put up at Government bungalows, and must take bedding and a few cooking utensils with him. He will do

well also to provide himself with some books about Burma. A list of them will be found at p. 694. Free use is made of the works there mentioned, and especially of Shway Yoe, in the following pages.

Inland Water Transport.—Ample facilities for visiting the interior are provided by the railways and also by the Irrawaddy Flotilla Company, which deserves special notice as one of the most successful steamer enterprises of modern days. The various vessels of the Company's fleet are nearly 550 in number, representing a tonnage of over 100,000 tons; and regular services by large express and cargo-boats are maintained between Rangoon and Mandalay, Bassein, and Henzada, between Mandalay and Katha and Bhamo, up the Chindwin, and for a short way up the Salween River, also on the Gyaing and Attaran Rivers (tributaries of the Salween). Practically every navigable creek in the Delta is served by smaller vessels of the fleet. For sailings to Mandalay and Bhamo, see Index under these places.

Climate, etc.—The climate of the Province for some distance from the coast consists of a wet season, from 15th May to 15th November, and a dry season for the rest of the year. Farther inland the rain becomes less; but, as Burma must at present be reached from the sea, the best time for visiting the Province is from November until February. During the wet season the rainfall at Rangoon is heavy—amounting to upwards of 90 in., and after February the heat is considerable till the first refreshing showers fall in May.

General Description.—The Province of Burma lies to the E. of the Bay of Bengal, and covers a range of country stretching from the 10th to about the 28th parallel of latitude. It is bounded on the N. and N.E. by China; on the N.W. by Bengal, Assam, and the feudatory State of Manipur; and on the W. and S.W. by the sea. To the S.E. lies the kingdom of Siam. The extreme length of the Province is approximately 1200 m., and its extreme width between the 92nd and the 101st parallels of longitude at about 20° North latitude is 575 m. The total area, including the Shan States, is about 262,000 sq. m., and the population, according to the census of 1921, was 13,212,192. It is formed of three separate tracts—Arakan, the Irrawaddy Valley, and Tenasserim—and is watered by five great streams—viz., the *Irrawaddy*, the *Chindwin*, the *Sittang*, the *Salween*, and the *Myitngè*. The first two rivers have their sources in the Northern chain of mountains in the interior, one head-stream of the Irrawaddy coming from Tibet, where are also the sources of the Salween; the Sittang rises in the hills S.E. of Mandalay, and the Myitngè drains the Shan States to the E. of that city. The Irrawaddy and the Salween are great rivers which, in the lower part of their course, overflow the flat country below their banks

during the rainy season, and, higher up, find their way through magnificent defiles. The Irrawaddy is navigable for over 900 m., but the Salween is practically useless as a means of communication, owing to the frequent obstacles in its channel.

The Northern portion of the Province is in the main an upland territory containing much rolling country intersected by occasional hill ranges, and with a few isolated tracts of alluvial plain. The country throughout the Delta is flat and uninteresting. Towards Prome the valley of the Irrawaddy contracts, and the monotony of the plain is diversified by a wooded range of hills, which cling to the Western bank nearly all the way to the neighbourhood of Thayetmyo, where was the old frontier between Upper and Lower Burma. The Salween Valley contains occasional harmonies of forest, crag, and mountain stream. On the other hand, the scenery in Tavoy and Mergui, and among the myriad islets which fringe the Tenasserim coast, is almost English in its verdure and repose. The forests of Burma abound in fine trees. Among these teak holds a conspicuous place. Almost every description of timber known in India is produced in the forests, from which also an abundant supply is obtained of the varnish used by the Burmese in the manufacture of lacquered ware. Sticklac of an excellent quality is obtained in the woods, and rubber has of late years been extensively planted. A marked feature in all the forests, and indeed all over Burma, is the beautiful flowering trees. Although there is plenty of large game in the country, it is not easy to get at, owing to the dense forests and the difficulty of obtaining experienced *shikaris* and baggage-animals; but good bags of snipe are made all over the country from August to December, and partridge, hare, jungle fowl, and duck shooting is to be had without difficulty in many parts of the Province.

Burma is rich in minerals. Gold in small quantities is won by dredging in the upper reaches of the Irrawaddy River. The Bawdwin mines in the Northern Shan States contain one of the richest silver-zinc-lead ore bodies known. Wolfram is found over a wide area: the Tavoy District is one of the largest wolfram-producing areas in the world. Tin is equally widespread. Seams of coal occur in various parts, some are being worked in the N. Shan States by the Burma Mines Co. Mogôk supplies the world with rubies; fine sapphires and numerous other precious stones of the less valuable kinds are found there, and in the Shan States. Petroleum is obtained in large quantities in the Minbu, Magwe, Myingyan, and Pakôkku Districts of Upper Burma, and in smaller quantities in the Arakan Division and elsewhere. Jade and amber are extracted in considerable quantities in the Northern part of the Myitkyina District. In

Lower Burma agriculture is the main employment of the people. Chillies, sesamum, tobacco, and sugar-cane are grown, and orchards are found near every village ; but rice covers nine-tenths of the total area under cultivation. Over much of the area the soil is very fertile, and bears annual crops without any addition to its fertility in the shape of manure. In Upper Burma there is much greater variety of crops. Rice is the most important crop from the standpoint of area, but it occupies less than two-fifths of the total area under crop ; sesamum, millets, beans, maize, ground-nut, cotton, tobacco, chillies and wheat are the chief crops after rice.

The commercial prosperity of the Province has more than kept pace with its rapidly increasing population. The chief articles exported are rice, timber, beans, cotton, lead, catch, hides, petroleum, candles, rubber, and rubies. The chief imports are machinery, piece-goods, silk, cotton, wool, and provisions, especially preserved milk, liquors, tobacco, iron, salt, and sugar.

The main commercial industries are those connected with the rice, oil, and timber trade. The indigenous manufactures of the country produce little beyond what is required for home consumption. Silk, lacquered ware, gold and silver work, wood and ivory carving, are among the most justly admired of Burmese handicrafts. The best silks are woven at Mandalay, and the silk industry has received a salutary impetus from the Saunders' Weaving Institute, which was recently established by Government at Amarapura. The principal lacquer workers are at Nyaungu, near Pagan ; gold and silver work is carried on at Rangoon, Moulmein, Thayetmyo, Mandalay, and to a greater or less extent in all the larger towns ; the best wood carvers are in Rangoon, Tharrawaddy, and Mandalay, and the best ivory carvers in Rangoon and Moulmein. The characteristics of Burmese art are vigour and novelty in design, but there is no lack of delicacy and finish in execution so far as lacquer work and silver and ivory-carving are concerned.

Should Burma be visited after a tour in India, the traveller cannot fail to be struck with the great difference in the people and the scenery of the two countries. The merry, indolent, brightly-clothed Burmese have no counterpart in Hindustan, and the richness of the soil and exuberance of the vegetation, together with the sleekness and vigour of the cattle, will be at once remarked. The life of the Burmese is free from the deadening effects of caste and seclusion of the women—two customs which stereotype the existence of so large a part of the inhabitants of India.

The Burmese as a race are of short stature and thick-set. The men wear long hair on their heads, but have little or none on their faces : flat in feature, they show unmistakably their near relationship

to the Chinese. The women are well treated and attractive-looking ; they go to market, keep shops, and take their full share in social and domestic affairs. Men and women alike are well clad, and delight in gay colours and silk attire.

In religion the Burmese are Buddhists, 85 per cent. of the population professing that religion. But the great majority of Burmans everywhere, and practically all village Burmans, retain the primitive reverence for the *nats*, the spirits of the forests, mountains, etc. "This," Sir George Scott observes, "is the heritage of an immemorial past ; it is the core of the popular faith." The Burman has learnt certain formulas ; he is scrupulous in giving alms to the monks, and he worships on set days at the pagoda : "but he governs his life and actions by a consideration of what the spirits of the air, the forest, the stream, the village, or the house may do if they are not propitiated." To these *nats*, who have their appropriate shrines, he makes offerings to avert misfortune, and of them he seeks favour for any undertaking, such as building a house or a boat, or making a journey. Each family has a tutelary deity or *nat* of its own, to which a thank-offering is made at the birth of a child or the solemnisation of a marriage. Every Burman is supposed to spend a certain part of his life as a novice, wearing the yellow robe, in the *pôngyi kyaung* (monastery). This is now frequently only a ceremonial observance for a single week ; but some stay longer, and some remain to become *pôngyis* or monks. The monks are the schoolmasters of the country, and perform this duty in return for the support they receive from the people. The shaven head and yellow robe of the monk are a common sight in all Burmese villages and towns.

History.—Burma is a country of discarded capital cities. At Tagaung, on the left bank of the Irrawaddy in the Katha district, there are traces of a royal city which is said to date back to the 9th century B.C. The Burmese who, issuing from the highlands of Central Asia, founded it, were driven in the second century A.D. to Pagan, near Myingyan. Here the great King Anawrata reigned from 1010 to 1052 A.D. He was to Burma what Asoka was to India. In the closing years of the 13th century his empire fell before the invading armies of Kublai Khan, and in 1284 Pagan became a feudatory of China. Thado Min, who claimed descent from the Kings of Tagaung, restored Burmese supremacy in 1364 and set up his capital at Ava. Bayin Naung, the famous general of Tabin Shweti (1530-1550) of the house of Anawrata, succeeded his master as King of Pegu in 1551, and ruled until 1581 over the whole of Burma except Arakan. Cæsar Frederick, writing of Pegu in 1569, tells us that he had "twenty-and-six" kings at his command, and it

is he whom Samuel Butler had in mind when he wrote in *Hudibras* (I. ii. 155) of demeanour "grave as the Emperor of Pegu." In 1740 we come to the great Talaing rebellion. The Burmese dynasty, which had returned to Ava, was dispossessed first of Pegu and then of Ava itself, which was captured and burned. But the Talaing ascendancy was of short duration. Immediately after the fall of Ava (1753) the star arose of a Burmese champion, Alaungpaya (known to Europeans as Alompra), who re-united the whole country under his sway.

So far as we have record, the first European to visit Burma was a Venetian merchant, Nicolo di Conti, who landed at Tenasserim in 1435 A.D. and travelled to Ava overland. Early in the following century Portuguese adventurers were importing firearms into the country and serving as mercenaries in the armies. During the opening years of the 17th century Felipe de Brito y Nicote seized the Burmese port of Syriam with the intention of carving a Portuguese province out of Lower Burma, but he was dislodged and executed in 1613. In the early part of the same century the Dutch may have settled on the island of Negrais at the mouth of the Rangoon River. Later, they planted a factory at Syriam, which endured until 1680. Although in 1617 two factors of the English East India Company were sent from Masulipatam to the city of Pegu to collect the goods of a Company's servant who had died there, after capture by the Burmese in Siamese territory, the first English factory in Burma was not established until 1647, when a short-lived one was founded from Fort St George at Syriam, which failed ignominiously nine years later. Thenceforward the Directors refused all offers, whether from a Burmese source or from their servants at Fort St George, to re-establish the factory. From time to time, however, an important private trade was maintained by the Company's officials and others in Burma, until in 1743 the old factory at Syriam was destroyed by rebellious Talaings. The French are said also to have maintained a factory at Syriam late in the 17th century, but little is known of it.

In 1755 Alompra founded Rangoon¹ to celebrate his conquest of the Talaings, and destroyed Syriam. After Alompra's success he found that the French merchants had been supplying warlike stores to the Talaings, and he put all Frenchmen to death. The English, who had generally supported the Burmese, were granted the island of Negrais and a factory at Bassein. In 1759, however, they were suspected of assisting rebels, and their factories were destroyed, and 10 Englishmen and 100 natives of India were murdered. In the following year Alompra died while laying siege to Ayuthia, the capital of Siam, and the English obtained permission

¹ Its original name was Yan-gön, "The end of strife."

from his successor, Naungdawgyi, to re-establish the Bassein factory. Sinbyuyin, who succeeded Naungdawgyi, took Manipur and Siam, and defeated two inroads from China. He died in 1776, and was succeeded by Bodawpaya, who conquered Arakan in 1784. This brought Burma into collision with the British in Chittagong. The Arakanese outlaws took refuge over the border, and harassed the Burmese rulers by inroads from British territory. This gave rise to friction, and in order to assist in the adjustment of matters in dispute, an envoy was sent to Burma in 1795 by the Governor-General of India. In 1819 Bodawpaya died, and was succeeded by Bagyidaw. Matters had not improved on the border, and in 1824 the Burmese invaded Manipur and Assam, and Maha Bandula, the great Burmese General, started with an army from Ava to take command in Arakan and invade Bengal.

The British Government formally declared war against Burma on 5th March 1824. The Burmese were driven out of Assam, Cachar, and Manipur; and Rangoon, Mergui, Tavoy, and Martaban were occupied by British troops. These, however, suffered much from sickness as soon as the rains began. All movements by land became impracticable, and by December the force occupying Rangoon had been reduced by sickness and otherwise to about 1300 Europeans and 2500 Indians fit for duty. The Burmese, under Maha Bandula, made a determined effort to drive the invaders into the sea; but their attack, in which 60,000 men are said to have taken part, was repulsed with great slaughter, and the Burmese army dwindled away, a portion of it retiring to Danubyu, which Maha Bandula fortified with some skill for a further effort. The British troops, having been reinforced, marched up the Irrawaddy Valley, and on 2nd April 1825 took Danubyu. Maha Bandula was killed in the cannonade, and with him all serious resistance came to an end. Prome was occupied, and the troops went into Cantonments for the rains. In September 1825 the Burmese endeavoured to treat, but, as they would not agree to the terms offered, hostilities recommenced; and in December the British advanced, and, after several actions with the Burmese troops, reached Yandabo, 16th February 1826. Here the envoys of the King signed a Treaty ceding to the British Assam, Arakan, and the coast of Tenasserim, and agreeing to pay a million sterling towards the cost of the war. In November 1826 a commercial Treaty was signed at Ava, and in 1830 the first British Resident was appointed under the Treaty to the Burmese capital. In 1837 Bagyidaw was deposed by his brother Tharrawaddy, who in 1846 was succeeded by his son Pagan Min.

In 1852, owing to a succession of outrages committed on British subjects by the Burmese Governor of Rangoon, for which all repara-

tion was refused, the British again declared war against the King of Burma; and towards the close of the same year Lord Dalhousie proclaimed that the whole of the Province of Pegu, as far N. as the parallel of latitude 6 m. N. of the fort at Myede, was annexed to the British Empire. Almost immediately after this Pagan Min was deposed by his brother Mindon Min, who ruled his curtailed kingdom with wisdom and success.

The pacification of Pegu and its reduction to order occupied about ten years of constant work. In 1862 the British possessions in Burma—namely, the Provinces of Arakan, Pegu, Martaban, and Tenasserim—were amalgamated and formed into the Province of British Burma, under the administration of a Chief Commissioner, Lieutenant-Colonel (afterwards Sir Arthur) Phayre being appointed to that office.

In October 1878 King Mindon died, and was succeeded by his son, King Thibaw, fifth in descent from Alompra. Early in 1879 the execution of a number of the royal family excited much horror in Lower Burma, and relations became much strained, owing to the indignation of Englishmen at the barbarities of the Burmese Court, and the resentment of the King and his Ministers at the attitude of the British Resident. In October 1879, owing to the unsatisfactory position of the British Resident in Mandalay, the Government of India withdrew their representative from the Burmese Court. Meanwhile, under the lax rule of Thibaw the condition of Upper Burma had been gradually drifting from bad to worse. The Central Government lost control of many of the outlying districts, and the elements of disorder on the British frontier were a standing menace to the peace of Lower Burma. The King, in contravention of Treaty obligations, created monopolies to the detriment of the trade of both England and Burma, and, while the Indian Government was unrepresented at Mandalay, representatives of France and Italy were welcomed, and two separate embassies were sent to Europe for the purpose of contracting alliances with sundry Continental powers. Matters were brought to a crisis in 1885, when the Burmese Court imposed a fine of Rs.2,300,000 upon the Bombay-Burma Trading Corporation, and refused the proposal of the Indian Government to submit the matter to arbitration. In view of the long series of unsatisfactory episodes in the British relations with Burma during Thibaw's reign, the Government of India decided once for all to adjust the relations between the two countries. An ultimatum was sent to King Thibaw, requiring him to suspend action against the Corporation; to receive at Mandalay an envoy from the Viceroy, who should be treated with the respect due to the Government which he represented; and to regulate the external relations of the country

in accordance with the advice of the Government of India. This ultimatum was despatched on 22nd October 1885. On 7th November King Thibaw issued a proclamation calling on his subjects to drive the British heretics into the sea. On 9th November a reply was received in Rangoon amounting to an unconditional refusal of the terms laid down. On 14th November 1885 the British expedition crossed the frontier, and advanced to Mandalay without encountering any serious resistance. On 28th the British occupied Mandalay, and next day the King and his evil genius, the Queen Supaya Lat, were sent down to Rangoon and afterwards to India. He died at Ratnagiri, S. of Bombay, on 16th December 1916. Upper Burma was formally annexed on 1st January 1886, and the work of restoring the country to order and introducing settled government commenced. For some years the country was disturbed by the lawless spirits who had been multiplying under the late *régime*, but by the close of 1889 all the larger bands of marauders had been broken up, and since 1890 Upper Burma has enjoyed greater freedom from crimes of violence than the Province formerly known as British Burma. In the time of Burmese rule China claimed a certain shadowy suzerainty over the Burmese empire. In July 1886 a Convention was signed at Peking, whereby China recognised British rule in Burma, and agreed to the demarcation of the frontier and the encouragement of international trade. By a further Treaty, signed on the 1st March 1894, the frontier was defined, and new arrangements made for the encouragement of trade and the linking of the telegraph systems of Burma and China. A breach of the Treaty by the Chinese in 1895 led to the conclusion of a supplementary agreement on the 4th February 1897, which defined the boundary afresh and made further provision for opening China to trade. For some years after the annexation of Upper Burma there was some uncertainty with regard to the boundary between Siam and a portion of certain of the Shan States. The Siamese claimed as part of the Province of Chengmai so much of Karenni, and of some other small States as lay to the east of the Salween. In order to investigate these claims the territory was visited by Mr Ney Elias in 1890. The Siamese refused to take part in that exploration, but in 1892-3 a Joint Commission of English and Siamese officers demarcated the frontier along the line selected by Mr Ney Elias. In 1897 the Province was constituted a Lieutenant-Governorship under Sir Frederick Fryer. Sir Harcourt Butler, G.C.I.E., K.C.S.I., became the first Governor in January 1923, and was succeeded in 1928 by Sir Charles Innes, K.C.S.I. The Army in Burma is now under the command of a Major-General, and forms the Burma Independent District.

The census of 1921 showed that the population had increased

during the previous decade by 9 per cent. The trade of the Province has greatly developed under British rule. The standard of living among the agricultural classes has improved.

Pagodas and Monasteries.—The pagodas and monasteries form the chief objects of interest throughout Burma, and as they are mostly built on very similar plans the following general description of these two classes of religious buildings (taken in the main from Shway Yoe) will be useful. The *Pagodas*,¹ while differing in various minor details, consist almost invariably of a masonry terrace, a high plinth, a bell-shaped body, and a *hti* or “umbrella” spire, a construction formed of concentric rings of beaten iron lessening to a rod with a small vane on the top. From the rings hang little bells with flat elongated clappers, which are caught by the wind and maintain day and night a melodious ringing. They are usually built upon elevated platforms, and are erected over relics of Gautama Buddha. In almost all the larger pagodas there are arched wings on each face, serving, as it were, as antechapels, and each containing a figure of Gautama, while the surrounding platform is frequently studded with minor temples, image houses, altars for the deposit of offerings, large bells, flag-posts, images of strange monsters, and other curious objects. These pagodas are to be found in every village in Burma, capping the hills frequently in out-of-the-way places, and contributing everywhere to the picturesqueness of the country. There is a special reason for this multiplication of fanes. No work is so highly regarded as the building of a pagoda. The builder is looked upon as a saint on earth, and when he dies he attains the holy rest. It avails little to repair a previous dedication, unless it be one of the great world shrines at Rangoon, Pegu, Prome, or Mandalay. According to custom and tradition, in order to prevent the admixture of *karma*, or merit, shrines built by royalties must not be repaired by commoners, and among commoners themselves the previous consent of the original founders, or their descendants, is always necessary to repair an old religious building. Hence old pagodas are seldom repaired, but new ones are constantly springing up. Outside most villages in Burma, however small, there stands also a *monastery* or *pôngyi kyaung*, where the monks pass their tranquil lives and supply a simple education to the children of the village. Ordinarily the monastery is built of teak, but in many places brick buildings are now being erected. The shape is always oblong, and the inhabited portion is raised on posts or pillars some 8 ft. or 10 ft. above the ground. They are never more than one storey high, for it would be an indignity to a holy monk to have any one over his head. A

¹ Attention is invited to the foot-note on p. 698 with regard to the removal of shoes and boots.

flight of steps leads up to the veranda, which extends all along the N. and S. sides and frequently all round the building. The steps are usually adorned with carvings or plaster figures of *nats* or ogres. From the raised floor rises the building with tier upon tier of dark massive roofs capped at intervals with tapering spires or *pyatthats*. The buildings are in many cases ornamented with the most elaborate carving. The interior accommodation is very simple. It consists, in the main, of a great central hall divided into two portions, one level with the veranda where the scholars are taught, and the other a raised dais 2 ft. or so above the level of the building. Seated upon this the priests are accustomed to receive visitors, and at the back, against the wall, are arranged images of Gautama interspersed with manuscript chests, small shrines, fans, and other religious implements, and miscellaneous gifts of the pious, heaped together ordinarily in very careless fashion. There are occasionally dormitories for the monks, but, as a rule, they sleep in the central hall, where the mats which form their beds may be seen rolled up round the pillows against the wall. In many monasteries there is a special room for the palm-leaf scribes, often detached from the main building, as are the cook-room and the bathing-houses. In one corner is usually a *thein*, a building for the performance of various rites and ceremonies, and more particularly for the examination and ordination of priests. At the monasteries he may be generally certain of a friendly welcome from the priests, provided he can speak Burmese or is accompanied by any one acquainted with that language. The priests are treated with great respect by the people of the country, and are invariably addressed as *paya*, or lord; and any one who visits a monastery should therefore bear in mind that the monks are accustomed to be treated with deference.

Pwès.—The traveller should make a point before leaving Burma of seeing something of the *Pwè*, the national amusement of the people. *Pwès* are of four kinds—the *Zat pwè*, which consists of acting, singing, dancing, and clowning; the *Yokthe pwè*, in which a similar performance is gone through by marionettes; the *Yein pwè*, a kind of ballet, with music and song, performed by a considerable company of young men or maidens, as the case may be; and the *Anyein pwè*, in which the number of actors is very limited: it is also accompanied with song and music, lasting from about 9 P.M. to about 2 A.M. *Yein pwès* are usually performed only on special occasions—in honour of some high official, or at a great pagoda feast; but *Zat pwès*, *Yokthe pwès*, and *Anyein pwès* are of constant occurrence on nearly all moonlight nights in every large town, and the traveller should have no difficulty in seeing all forms of entertainment, either in Rangoon or Mandalay. The performances take place in the open

air, last all night, and usually for several nights in succession, and are free and open to all, the actors being paid by the giver of the entertainment. The majority of the audience stay the whole night—say from 8 P.M. till sunrise; but an hour or two of the performance will probably satisfy the British traveller. A full description of the different kinds of *pwè* is given by Shway Yoe in chapter 29 of *The Burman*.

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GUIDE TO THE PRONUNCIATION OF BURMESE PROPER AND PLACE NAMES.

(Prepared by Prof. D. G. E. HALL, of University College, Rangoon.)

Note.—The phonetic scheme is based upon that used in the Oxford Pocket Dictionary and explained on p. viii of that work.

AKYAB, Āk-ē-āb.
 A'MARAPURA, accent on first syllable.
 ANAWRAT'A, Ān-ōr'-ā'-tah'.
 AYA, Ah'-vā.
 BAWDWIN, Baw'-dwin.
 BASSEIN, Bā-sēn'.
 BHAMO, Bah-mō'.
 BILUGYUN, Bē'-lōō-jōon'.
 CHINDWIN, Chīn-dwīn.
 DAINGWUNKWIN, Dīng' - wōōn-kwīn'.
 DANUBYU, Dā'-nōō-bew.
 DUKANTHEIN, Dōō-kān-thān.
 EINDAWYA, Ān-daw-yah.
 GOKTEIK, Gō'-tāk.
 GYAING, Jīng.
 GYOBINGAUK, Jō-bīn-gowk.
 HEHO, Hā-hō'.
 HEINSUN, Hān-sōon.
 HENZADA, Hēn-zā-da'.
 HLAING, Līng.
 HMAWZA, Maw-zah.
 HPAYON, Pā-yōn'.
 HSIPAW, Sē'-paw.
 INSEIN, Īn-sēn, more correctly, Īn-sān.
 INYE, Īn-yā.
 KADAİK, Kā-dīk.
 KADO, Kā-dō'.
 KALE, Kā-lā.
 KALEWA, Kā-lā'-wah.
 KALYANISIMA, Kāl-yān-ī-sē-mā.
 KATHA, Kā-thah'.
 KAUNGGO, Kowng-ō.
 KAWHNAT, Kaw-nāt.
 KWANHĻA, Kwōn'-lah.
 KYABIN, Chah-bīn.
 KYAIKKAUK, Chīk-kowk.
 KYAIKPUN, Chīk-poōn'.
 KYAIKTHANLAN, Chīk-thān-lān.
 KYANGIN, Chān-gīn.
 KYANZITTHA, Chān-zī-thah.
 KYAUKMYAUNG, Chowk-myowng.
 KYAUKPANDAUNG, Chowk-pān-downg.
 KYAUKPYU, Chowk-pyōō.
 KYAUKSA, Chowk'-sā.

KYAUK TAW GYI, Chowk Taw Jē.
 KYAUKZEDI, Chowk-zā-dē.
 KYONKADAT, Chōn-kā-dāt.
 KYONPYAW, Chōn-pyāw.
 LEIKSAW, Lāk-saw.
 LETPADAN, Lēt-pā-dān'.
 MAGWE, Mā-gwā'.
 MAINGKAIING, Mīng-Kīng.
 MAYMYO, Mā'-mỹō.
 MEIKTILA, Māk-tī-lā.
 MERGUI, Mēr-gwē'.
 MIGADEIKPA MIN-NGÈ, Mē'-gah-dāk'-pah-mīng'-ā.
 MINGALADON, Mīn-gā-lā-dōn'.
 MINHLA, Mīn-lah.
 MOGOK, Mō-gōk'.
 MONYWA, Mōn'-yōō-ah.
 MOULMEIN, Mōōl-mān.
 MUPUN, Mōō-pōon.
 MYEDE, Mýa-dā'.
 MYINGYAN, Mīn-jahn'.
 MYITKYINA, Mī-chī-nah'.
 MYITNGE, Mīng'-ā.
 MYITTHA, Mýī-thah.
 NAGAYON, Nah-gā-yōn.
 NATKYIGON, Nāt-jē-gōn.
 NAUNGLON, Nowng-lōn.
 NAUNGPUAUNG, Nowng-pōō-owng.
 NEGRAIS, Nē-grā'-īs.
 NGAWUN, Nah-wōon.
 NYAUNGBINZEIK, Nýowng-bīn-zāk.
 NYAUNGU, Nýowng-ū.
 PA-AN, Pe-ān'.
 PAGAN, Pā-gahn'.
 PAGAT, Pā-gāt'.
 PALETWA, Pā'-lā-twah'.
 PATODAWGYI, Pāt-ō-daw-jē.
 PAUNGDE, Powng-dē.
 PAZUNDAUNG, Poozen-dawng.
 PROME, Prōm.
 PYINBONGYI, Pīn'-bōn-jē.
 PYINMANA, Pīn-mā-nah'.
 PYINTHA, Pīn-thah.
 SAGAING, Sā-gīng'.
 SALEMYO, Sah-lā-mỹō.
 SEIKGYI, Sāk-jē.
 SHEINHAGA, Shān-mā-gah'.
 SHINBINKUGYI, Shīn-bīn-kōō-jē.

SHITTAUNG, Shít-towng.
 SHWEAUNGYO, Shwā-owng-jō'.
 SHWEDO, Shwā-bō.
 SHWE DAGON, Shwā-Dā-gōn'.
 SHWEGUGALE, Shwā-gōō-glā'.
 SHWEHMAWDRAW, Shwā'-maw-daw'.
 SHWEMOKTAW, Shwā-mōk-taw.
 SHWENANDAW KYAUNG, Shwā-nān-daw-chowng.
 SHWENATTAUNG, Shwā-nāt-towng.
 SHWENYAUNG, Shwā-nýowng.
 SHWESANDAW, Shwā-sān-daw.
 SHWETHALYAUNG, Shwā - thāl-yowng'.
 SITTAUNG, Sít-towng.
 SULE, Sōō-lā'.
 TAGAUNG, Tā-gowng.
 TANGYAN, Tān-jahn.
 TAUNG-GYI, Towng-jē.
 TAUNG-WAING, Towng-wīng.
 TAVOY, Tā-voy'.
 TENG YUEH, Teng-yōō-ī.

THABEIKKYIN, Thā-bā'-chín.
 THATBYINNYU, That-býin-nýōō.
 THATON, Thā-tōn.
 THAYAUNG - GAING, Thā-yowng-jawng.
 THAYETMYO, Thā-yēt'-mýō.
 THAYEKHETTAYA, Thā-yā-kēt-tāyah.
 THAZI, Thah-zē.
 THEINDAWGYI, Thān-daw-jē.
 THIBAW, Thē-baw.
 TIGYAING, Tē-jīng.
 TOUNGOO, Tow-ngōō'.
 YAMETHIN, Yā-mār'-thín.
 YANKINTAUNG, Yān-kín-ṭowng.
 YEBAWMI, Yā-baw-mē.
 YENANGYAUNG, Yē-nan-jowng.
 ZAING, Sanaing.
 ZEGYO, Zā-jō.
 ZINGYAIK, Zín'-jīk.
 ZWEGABIN DAUNG, Zwā'-gā-bí-downg.

ETYMOLOGY OF PLACE NAMES IN BURMA.

Some of the more common component parts in place names with their meanings are given below :—

AING, small lake.
 CHAUNG, stream.
 HAUNG, old.
 KAN, tank.
 KON, high ground.
 KYI, big.
 KYUN, island.
 LE, rice-land.
 MYO, town.

NGE, small.
 PIN, tree.
 SE, dam, weir.
 SEIK, landing-place.
 TAUNG, hill.
 TAW, jungle.
 THIT, new.
 WA, mouth.
 YWA, village.





RANGOON.

Arrival.—It may be taken for granted that the visitor, either from England or from India, will land at Rangoon, and it will therefore be convenient first to describe the principal objects of interest in that city, and then to mention a few of the principal tours which can be made thence to other parts of the Province.

RANGOON * (lat. 16° 46', long. 96° 11') is the capital of the Province and the seat of the Local Government. It is 21 m. from the sea, and is situated on the Rangoon River, which is connected by waterway with the Irrawaddy. In 1852 it was a mere fishing village. In 1921 it was a city of 341,962 inhabitants, with a trade larger than that of any Indian port except Calcutta and Bombay. The total sea-borne trade in 1927-28 was 5,558,831 tons, of which 1,968,688 tons were imports, 3,875,075 tons were exports, and 15,068 tons transshipment. The imports are principally coal, cotton goods, metals, provisions, silk, machinery, and sugar; the exports, rice (two-thirds of the whole), wood, raw cotton and oils. The number of steamers entering the port in 1927-28 was 1526, with a net tonnage of 3,880,057 tons. The number of sailing-vessels in the same year was 129, with a tonnage of 10,293 tons. Of the population 112,000 are Burmese, 125,000 Hindus, 62,000 Muhammadans, 25,000 Christians, 12,000 Chinese and 6000 others. There is an excellent service of motor-omnibuses to all parts. An electric tramway runs E. and W. through the town and business quarters, and to the Shwe Dagon Pagoda. The municipality covers an area of about 28 sq. m., and has an income of about £433,000. There is a Pasteur Institute here.

Rangoon city consists of the municipality, the former Cantonment, and the port. It is lit with electricity. Its water-supply is obtained from a large reservoir lake constructed at Hlawga, about 17 m. beyond the town. The drainage system consists of gravitating sewers, which receive the sewerage from house connections and carry it to ejectors. These discharge their contents automatically into a main sewer, through which all the night soil and sullage water are forced into an outfall near the mouth of the river. The system has been working with most successful results.

The business quarter lies along the N. bank of the river, from Kemendine and Alone on the W. to Pazundaung on the E. On the opposite side of the river is the suburb of Dalla, which was a place of note before Rangoon was founded (see p. 688).

Important changes took place in Rangoon in October 1928 when the new **Cantonment** was opened at **Mingaladon**, 15 m. to the N. of the city (rly. stn. on the line to Prome) and two-thirds of the area of the old Cantonment was handed over by the military authorities to the Local Government. The remaining third continues under military control.

The principal objects of interest in and around Rangoon may be classified as follows:—

1. The pagodas and monasteries.
2. The bazars and Indian shops.
3. The rice, timber, and oil works.
4. The public buildings.
5. The parks and lakes.
6. The remains at Syriam.

(1) **Pagodas and Monasteries.**¹—There are numerous pagodas in and about Rangoon. The *Shwe* (golden) *Dagon* and the *Sule* deserve special mention. The great *Shwe Dagon Pagoda* is the most venerable, the finest, and the most universally visited of all places of worship in Indo-China. Its peculiar sanctity is due to the fact that it is the only pagoda known to Buddhists which is credited with containing actual relics, not only of Gautama, but of the three Buddhas who preceded him in this world. Hence it attracts countless pilgrims, not only from all parts of Burma, but also from Cambodia, Siam, Korea, and Ceylon. It is situated about 2 m. from the Strand, and may be reached by motor-omnibus, electric tramway (little used by Europeans), taxi or ticca gharry. The stately pile stands upon a mound, partly natural and partly artificial, which has been cut into two rectangular terraces one above the other, each side, as in the case of all pagodas, facing one of the cardinal points of the compass. The upper terrace, which has been carefully levelled and paved and repaved by the pious, rises 166 ft. from the level of the ground, and is 900 ft. long by 685 ft. wide. The ascent was by four flights of brick steps, one opposite the centre of each face—but the Western face has been closed by the fortifications built by the British conqueror to dominate the town and secure the pagoda, where there was so much desperate fighting in the Burmese Wars. The S. ascent is that most frequently used. Under the regulation introduced in 1921, all visitors of all nationalities, except soldiers and

police officers in uniform on duty, must go up the Pagoda barefooted. At the foot are two gigantic leogryphs, built of brick and covered with plaster. The effect is rather spoilt by an external porch which was added. From them up to the platform the long stairs are covered by a rising series of handsomely-carved teak roofs, supported on huge wood and masonry pillars. The heavy cross-beams and the panelling are in many places embellished with frescoes representing scenes in the life of Gautama and his disciples, and with hideously curious representations of the tortures of the wicked. The steps themselves are exceedingly primitive and dilapidated, consisting in some parts of broad stone flags, and in others of simple sun-dried bricks, worn by the feet of myriads of worshippers. On either side are beggars and numerous stalls, at which gold-leaf, flowers, and other offerings may be bought, and on the E. side, just a little above the bottom of the flight of steps, there is a small bazar in which marionettes, gongs, drums, etc., may be obtained. The stairs debouch on a broad, open, flagged space, which runs all round the pagoda, and is left free for worshippers. In the centre of this springs, from an octagonal plinth, the pagoda itself (see Fergusson's *Eastern Architecture*, 2, 342-7). It has a circumference of 1355 ft., and rises to a height of about 370 ft., or a little higher than St Paul's Cathedral. It is profusely gilt from base to summit, and is surmounted by the usual gilt iron-work *hti* or "umbrella," on each of whose many rings hang multitudes of gold and silver jewelled bells. This *hti* was presented by Mindon Min, the late King of Burma, and was placed on the summit at a cost of about £50,000. It was constructed by voluntary labour, and subscriptions in money and jewels, with which the vane and upper-

¹ Europeans intending to visit shrines in Burma are warned that in recent years the Burmese have insisted upon all visitors discarding their footwear before entering the precincts. Wherever the notice "Footwear prohibited" is displayed at the entrance to a pagoda, it should be scrupulously adhered to.

most band are richly studded, flowed in from all parts of Burma. The pagoda is now encircled by several rings of electric incandescent lamps, which make it almost as conspicuous a landmark by night as it has always been by day. Some years ago the whole pagoda was regilt, and the *hti* was then lowered to the platform, and replaced, renovated and with many costly jewels added. At the corners of the basement are somewhat Assyrian-like figures of *Manōk-thiha*—creatures with two bodies and one head, half-lion, half-man, with huge ears and ruffled crest—and all round about are figures of lions displaying an ample show of teeth between their grinning lips. The tale is that a certain Indian Princess became the wife of a lion; subsequently this lion was slain by his own son. Soon after the Prince was seized with a severe ailment, which could be cured only by dedicating to a pagoda the figure of a lion. Since then, it is said, the placing of the figures of lions at the entrances of pagodas has been in vogue. In reality these lions are the *dwarपालas*, or guardians of the entrance to the pagodas, and were probably relics of the pre-Buddhist cults of India.

The four chapels at the foot of the pagoda are adorned by colossal figures of the sitting Buddha, and in the farthest recess, in a niche of its own, is a still more goodly figure, the thick gilding darkened in many places by the fumes of thousands of burning tapers and candles. Hundreds of Gautamas, large and small, sitting, standing, and reclining, white and black, of alabaster, sun-dried clay, or wood, surround and are propped up on the larger images. High stone altars for the offering of rice and flowers stand before the lions, interspersed with niche altars for burnt offerings. On the outer edge of the platform are a host of small pagodas, each with its *hti* ;

tazaungs, image-houses overflowing with the gifts of generations of pilgrims; figures of Buddha in single low stone chapels; tall posts (called *tagundaing*), flaunting from which are long cylindrical streamers of bamboo framework, pasted over with paper or cloth, depicting scenes from the sacred history, and often inscribed with pious invocations from the offerer, or surmounted by the sacred *hintha* (Brahminy goose), the emblem of the Talaings, or the *kalaweik*, the crane of the Burmese. Interspersed among these are multitudes of bells of all sizes. The bells are hung on stout cross-beams, and beside them lie deers' antlers and wooden stakes with which the worshipper strikes them as he passes, and so calls the attention of *nats* and men to his acts of piety. The alternative strokes must be struck on the ground, so as to invoke the testimony of the god of the earth. In the N.E. corner, covered by a gaily-decorated wooden shed, hangs a bell of enormous size, inside which half-a-dozen men can stand. It was presented by King Tharrawaddy in 1840, and is said to weigh 42½ tons, and to be the third largest bell in the world. It bears a long inscription recounting the merits gained by the monarch who presented it. The bell has a curious history. After the Second Burmese War the British made an attempt to carry it off to Calcutta as a trophy, but by some mishap it was sunk to the bottom of the river. The European engineers failed to raise it. The Burmans after some years begged that the sacred bell might be restored to them if they could recover it. The petition was granted with a laugh; but they set to work, got it out, by lashing bamboos to it and causing it to float from its sunk position, and carried it in triumph to the place where it now hangs. It would be impossible to describe in any detail the myriad

objects of interest which are gathered on the pagoda platform ; but the traveller should not fail to examine the magnificent carving at the head of the Eastern ascent, nor that on the canopy of the colossal recumbent figure of Gautama on the Western face of the platform. The carving and inlaid glass work on all four of the chapels attached to the pagoda itself deserve notice, the carving over the Eastern chapel being particularly curious ; it has been supposed to represent a scene from the life of the Buddha, or from one of the Jatakas, got up in a modern style, illustrative of the capture of the pagoda by the British. The British soldiers, with their rifles, and their officers, each holding a telescope to his eye, are clearly recognisable on the highest tier, while on a lower tier the defeated Burmese show little sign of despondency.¹ To the W. of the platform is the Arsenal. At the base of the pagoda hill are many monasteries embowered in groves of palmyra palms and shady trees, and to the S. is a small convent of nuns, not far from the Rest-house built by the King of Siam for pilgrims from his dominions.

The platform is never deserted. Even long after midnight the voice of the worshipper may be heard in the night air chanting his pious aspirations, while on feast-days the laughing, joyous crowd of men and maidens in their gay national dress makes the platform of the Shwe Dagon one of the finest sights in the world. The visitor should, if possible, take an interpreter with him, and should provide himself with a few rupees. He can then, if he pleases, have his fortune told by one of the numerous *sayas*, who are always to be found on the platform ; or

he can buy for a rupee or two one of the quaint triangular gongs used by the religious mendicants to attract the attention of the pious, or supply himself with gold-leaf, prayer-flags, flowers, or specimens of the curious marionettes and other toys which are offered for sale on the steps and on the platform.

Buddhists fix the date of the erection of the Shwe Dagon Pagoda at 588 B.C. ; but state that the site was sacred for cycles before, since the relics of the three preceding Buddhas were found interred when the two Talaing brothers, Taphussa and Bhallika, came with their precious eight hairs of Gautama to the sacred hill. The original pagoda is said to have been only 27 ft. high, and to have attained its present height by being repeatedly cased with an outer covering of bricks several feet in thickness. The shrine has remained unaltered in size and shape since 1564, and probably will never be altered again. At all times and at all distances it appears imposing and sublime, like the religion whose followers have built it. It looks best, perhaps, on a bright moonlight night, and the traveller is advised, if practicable, to pay a visit to the platform by night as well as by day ; but the visitor must go barefooted. The above description comes mainly from Shway Yoe. A useful little local guide can be purchased in Rangoon. Another guide-book to the pagoda has been prepared by Dr Baker, a former Secretary to the Y.M.C.A.

The **Sule Pagoda**, close to the Strand, is well worth a visit. The regulation (p. 000) as to the removal of footwear applies here, as elsewhere in Burma. The visitor should ascend the platform and examine the many curious shrines and figures with which it is adorned. Among others will be found a representation of the

¹ The remains of three officers and an unnamed soldier, who were killed at the storming of the pagoda in April 1852, and who were buried at the N.E. corner of the platform, were removed in January 1929, and re-interred with full military honours in the old cantonment cemetery.

Sule Nat, the spirit after whom the pagoda is named, and the legendary guardian of the hill upon which the Shwe Dagon Pagoda is erected. Behind the Ngadaty Pagoda, near the Royal Lakes, at Tamwe, on an eminence, has been built an enormous reclining figure of Buddha called the Shwe Tha Lyaung, which monthly attracts thousands of people, including many Europeans. The cavity of each ear could easily accommodate two or three persons.

The Rangoon Monasteries are very numerous. They are none of them of any special interest, and a brief visit to two or three of them will probably suffice. Some of the most picturesque are at Kemmendine, near the railway station, and a visit to them may be combined with an inspection of the images of Gautama in process of manufacture hard by, and of the shops of the *kalaga* makers, which are also at Kemmendine. The *kalaga* is a kind of blanket, usually red, covered with strange figures in appliqué work. *Kalagas* can sometimes be purchased ready-made, but must usually be ordered beforehand. They make quaint and handsome *portières* or hangings. There are other large monasteries in Bahan, Wingaba, Godwin Road, and at Pazundaung.

(2) **The Bazaars and Indian Shops.**—The bazaars are a great institution throughout Burma. They are large markets, usually the property of the municipality, in which much of the retail trade of the country is carried on. They are also the great centres of gossip among the Burmese. A visit should be made to the *municipal bazaars* on the Strand Road and at Kemmendine, and to the *Surati-bazar* in China Street. At the bazar in Strand Road specimens of the silks and lacquer work for which Burma is famous can be purchased. Apart

from the bazaars, the Indian shops are not of special interest. A feature of Rangoon that needs mention are the Indian night stalls along the footpaths principally of the bazar quarter, where a great variety of eatables and merchandise are sold. The best shops for the visitor who wishes to buy without waiting while Burmese craftsmen make to his order are *Burma House*, 11 Merchant Street, for Burmese curios; *Khaimchand Tejmal*, in Phayre Street, for Burmese, Chinese, and Japanese curios, and for oriental silks, etc.; *Goonamal Parasram*, in Merchant Street, for Burmese and Indian goods; *Hok Eong & Co.*, Phayre Street, for Chinese curios. In these shops he will find fair specimens of oriental art at reasonable prices; but if he desires the best, or wishes to see the articles in process of manufacture and to buy rather more cheaply, he should go to Godwin Road for silver or woodwork carving. He will find several shops on the E. side of the road. For silver work *Maung Yin Maung*, *Maung Po Khine*, and *Maung Po Tin*, all in Godwin Road, are about the best. But these men maintain little or no stock of articles for sale. The visitor must order what he wants and wait till he gets it. The usual charge for embossed silver bowls is double the weight of the bowl in rupees; but for the finest work prices are higher.

(3) **The Rice, Timber, and Oil Works.**—It is well worth while to visit one of the great rice-mills. Those of *Messrs Steel Bros.*, at Kanaungto, and of *Messrs Bulloch Bros.*, at Pazundaung, are two of the largest, and permission to visit them can generally be obtained. There are over 480 rice-mills in Burma, and nearly 150 saw-mills, employing 50,000 hands. The Bombay-Burma Trading Corporation's timber-yard

at Alone, the Government timber depot at Alone, and the Bombay-Burma Trading Corporation's saw-mill and timber depot at Dalla, should also be visited. Elephants are employed there to stack the timber, and are famous for the intelligence with which they perform the task. The oil works of the Burma Oil Co., Ltd., at Dunneedaw and Syriam are also worth seeing.

(4) **The Public Buildings.**—Rangoon can boast of many fine public buildings. The **Post Office**, the **Currency Buildings**, and the **Sailors' Home** are on the Strand; the **Telegraph Office** is at the corner of Dalhousie and Phayre Streets; and the **High Court** faces Fytche Square. To the E. of the business quarter is a fine pile of buildings for the accommodation of the **Secretariat** and other public offices. In front of it will be noticed the "**Services Memorial**"—a drinking fountain erected by members of the various Civil Services of the Province in memory of their comrades who were killed or died during the Third Burmese War. The names of the officers commemorated are inscribed on the shields surrounding the fountain. Close to the **Railway Station** at the junction of King George's and King Edward's Avenues, is an imposing obelisk erected as a memorial to those who fell in the Great War. The very handsome **Roman Catholic Cathedral** is at the corner of Montgomery Street and Sparks Street, close to the Secretariat Buildings. To the N.W. of the old Cantonment, in well-wooded grounds, is **Government House**—a handsome three-storeyed building, erected at a cost of 6 lakhs of rupees. The **University College** and the **General Hospital**, situated on either side of Commissioner's Road, are spacious buildings, and near to them is the **Anglican Cathedral**. Visitors interested in the progress of educa-

tion in the E. would do well to pay a visit to the College, and also to **St John's (S.P.G.)**, on Mission Road and St John's Road; **St Paul's** (Roman Catholic), in Bigandet Street; and the **Baptist Institutions** at Alone. The **Rangoon University** is under construction in Promé Road. The **Bernard Free Library**, in the compound of the Govt. High School, contains an interesting collection of ancient Pali, Burmese, Talaing, and Sanskrit palm-leaf manuscripts. The **Phayre Museum** was close to the Bernard Library, but has been removed to make room for the new General Hospital, and housed in a room of the Secretariat offices pending the construction of a special building; admission to it is obtained by special permission of the Commissioner of Pegu. The **Dufferin Hospital** is in Mission Road, close to St John's College. The **Government Printing Press** is situated to the E. of the Secretariat. In the N.E. corner of the Parade Ground is the **Jubilee Hall**, erected to commemorate the Jubilee of her late Gracious Majesty Queen Victoria. The hall serves as a theatre, and is used for public meetings and for recreation purposes. The **Jail** on Commissioner's Road is one of the largest in the British Empire, having accommodation for over 3000 prisoners. Many different industries are conducted by the prisoners, and in the jail salesroom specimens of their handicraft may be purchased, including excellent carvings and furniture.

(5) **The Parks, Gardens, Zoo, and Lakes.**—These afford pretty rides and drives and an excellent service of taxi-cabs and motor-omnibuses places the whole of them within easy reach of the visitor. He should take one drive in the old Cantonment, say along Godwin Road, past the Parade Ground and Race-course,

then to the left past the Pegu Club, to the Prome Road, then along Prome Road to Halpin Road (the "Ladies' Mile"), along Halpin Road to the Gymkhana, thence past Government House along Alone Road to the Great Pagoda, and thence through the Cantonment gardens and back by Voyle Road to the town.

Another drive which should on no account be omitted starts from the railway station, passing Northward through the Victoria Memorial Park, opened by King George V., then Prince of Wales, on 13th January 1906. On the way are enclosures for wild beasts, which form a great attraction to the Burmese. Thence the drive circles round the Royal Lakes, the banks of which are planted with flowering shrubs. The picturesque **Dalhousie Park**, which was dedicated to the public use by the Governor-General of that name, makes a favourite promenade with a bandstand on a spot of land jutting out from the N. A statue has been erected at the entrance to the Park as a memorial of King Edward. The view of the Shwe Dagon Pagoda across the water is very striking, the effect being particularly fine when the sun is setting behind it. The Boat Club (private) is just opposite on the S. shore. The **Rangoon Club-house** is close by. The road continues back to the town; but those who are prepared to go farther afield can obtain a very pretty drive by taking the Prome Road to the **Victoria Lake**, skirting the lake and returning by the Kokine Road (total distance about 15 m.). They will pass through miles of pineapple gardens, among which various picturesque and shady rides can be had. Another interesting drive is along the Prome Road to the 13th mile, thence to the W. along the Mingaladon Road, past the very pretty Mingaladon Golf-course and

Club-house to the **Rangoon Insein Road** at Insein, by which ~~the~~ return to the city is made: total distance about 28 m.

(6) **Syriam**.—The visitor with an afternoon to spare may well spend it at Syriam, which can be reached from Rangoon by ferry. Syriam was formerly a place of some importance, and is of special interest as being the site of the earliest European settlements of any importance in Burma. The town is said to have been established in 787 A.D., but little is known of its history up to the 16th century, when it was presented by the King of Arakan to Philip de Brito, who, with his Portuguese, had assisted the King in the conquest of Pegu. In 1613 Syriam was besieged and captured by the King of Ava, all the Portuguese being either slain or sent to Upper Burma, where a few of their descendants exist to this day. From 1631 to 1680 the Dutch maintained a factory at Syriam. The English E. India Company established a factory in 1647, but it was not successful, and was withdrawn in 1656. It was never re-established, but private traders, sometimes licensed by the Company, continued to use the old factory and dock, until they were burned during the Talaing rebellion in 1743. Nothing now remains of these once flourishing depots except the substantial ruins of an old Church, some tombs, and the foundations of a few masonry houses. The Church was built by Monseigneur Nerini, the second vicar-apostolic of Ava and Pegu, in the early part of the 18th century. In 1756 the bishop was murdered by Alompra. From that year until 1760 the mission remained deserted, and was then removed to Rangoon. The ruined Church is now buried in the jungle about $\frac{1}{2}$ m. from the landing-stage, and, being a "protected monu-

ment" is looked after by Government. If the visitor is accompanied by an interpreter, he will have no difficulty in finding some one in the village to show him the way to the ruins. Originally a mere village of about 1000 inhabitants, Syriam was selected by the Burma Oil Company as the site of their great oil refineries, and is now a flourishing town with a population of over 15,000 inhabitants. Its archaeological interest is now rivalled by its industrial importance. Six m. from Syriam is the **Kyaikkauk Pagoda** standing on a hill, which affords a fine view. This is a prominent landmark in approaching Rangoon from the sea.

ROUTE I.

Rangoon to Pegu, Mandalay, Sagaing, Myitkyina and Bhamo, returning to Rangoon by rail or river, *via* **Prome**.

The arrangements for this tour will depend entirely upon the amount of time which the visitor is prepared to devote to it. If he has only a few days to spare he will not be able to do more than proceed to **Mandalay** by rail, spend two or three days there, and return by the same route to Rangoon. If he has a week at his disposal he may proceed to **Mandalay** by rail, stopping an afternoon at **Pegu**, and may return by steamer to **Prome**, and thence by rail to Rangoon. To the visitor with leisure the whole voyage (a week) in the comfortable Irrawaddy steamers from Rangoon to Mandalay may be recommended. There is much beauty of a quiet kind in the river below. Three weeks will enable him to extend his tour to **Bhamo**; and a

longer period to go on to the first defile and to break the return journey at **Thabeikkyin** for the **Ruby Mines**, at **Nyaungu** for **Pagan**, and at **Yenangyaung** for the **oil wells**. A visit to the ruby mines, 50 m. from the river-bank, can be made by motor service. **Pagan** and **Yenangyaung** can be more easily managed, as they are near the river-bank, but a visit to either place will involve small special arrangements. In the following paragraphs a few brief particulars will be given of the principal places. The visitor must decide for himself what to see and what to omit.

An express train leaves Rangoon at 1.30 P.M., reaches **Pegu** at 3.2 P.M., **Toungoo** (where dinner can be obtained) at 8.10 P.M. and **Mandalay** at 6.25 on the following morning. There is a night-mail train also, leaving Rangoon at 6 P.M. The visitor who wishes to see **Pegu** can thus allow himself a few hours of daylight there, after which he can dine at the railway refreshment rooms and go on by the night mail, which leaves **Pegu** at 7 P.M. and reaches **Mandalay** at 1.20 P.M. on the following day.

47 m. **PEGU** station (R., two D.Bs.): a Club, open to visitors; hackney carriages procurable; motor service, 7 m., to **Thanatpin**, where snipe and duck shooting is obtainable), a town of 18,769 inhabitants, the headquarters of the District of that name, is said to have been founded in 573 A.D. by emigrants from **Thaton**, and was once the capital of the **Talaing** kingdom. It is described by European travellers of the 16th century as of great size, strength, and magnificence. It was destroyed by **Alompra**, but rebuilt under **Bodawpaya**. It is interesting chiefly on account of its pagodas and a colossal figure of **Gautama**.

The **Shwehmawdaw Pagoda**, lying E. of the railway station,

and said to contain two hairs of Buddha, is a shrine of great sanctity. Successive Kings of Burma and Pegu lavished their treasures on it in repairing and enlarging it. When originally built it was only 75 ft. high, but as it now stands it is about 288 ft. high and about 1350 ft. in circumference at the base. It was repaired by Bodawpaya about 100 years ago, and subsequently re-gilt under the supervision of the local elders (see Fergusson, *Ind. Arch.*, 2, 343-4). The damage caused to the concentric rings of the pagoda by the earthquake of 1917 has been repaired.

A good panoramic view of Pegu and its suburbs is obtained from the **Shweaungyo Pagoda**, which is situated at the centre of the E. wall of the city. At about 700 yards from the S. face is **Jetuvati**, the encampment of Alompra when he beleaguered the town in 1757 A.D. Within the walls are visible the sites of the Palaces of the Kings of Hanthawaddy. Traces of a double wall and moat may also be seen. Outside the N.E. corner of the walls is rising ground, the site of the ancient city of Hanthawaddy.

The enormous recumbent figure of Gautama, known as the **Shwethalyaung**, is about 1 m. to the W. of the railway station. It is 181 ft. long and 46 ft. high at the shoulder. According to the Burmese histories it was built by Migadeikpa Min-ngè in 994 A.D. Pegu was taken by Alompra in 1757 A.D., and utterly destroyed for a generation. In the meanwhile all remembrance of this gigantic image was lost. The place on which it was situated had become dense jungle, and the image itself turned into what appeared to be a jungle-covered hillock. In 1881 the railway was being constructed, and laterite was required for the permanent way. A local contractor in

searching for laterite came across a quantity in the jungle, and on clearing the place uncovered the image, which has become an object of deep veneration. It has been completely restored, and a lofty pavilion has been erected over it. The "Pillars of Victory" in the District Court Compound should be seen.

Just before reaching the Shwethalyaung is seen the **Kalyanisima** or ancient Hall of Ordination in the Zaing-ganaing quarter, founded by King Dhammacheti in 1476 A.D., with ten large stones covered with Pali and Talaing inscriptions. $\frac{1}{2}$ m. W. of the Shwethalyaung is the **Mahazedi**—a huge pagoda built by Hanthawadi Sinbyuwin about the middle of the 16th century. It was destroyed by Alompra, but the remains are 170 ft. high. It has been restored. 1 m. S. of the Mahazedi is the **Shwegugale Pagoda**, with its sixty-four images of Buddha constructed by Siamese architects. About 2 m. down the Rangoon Road lies the **Kyaikpun** pagoda, with four colossal figures, each about 90 ft. high, seated back to back. These represent Buddha and his three predecessors.

The golf-course at Pegu is situated on a rising ground to the N.E. of the city, outside the wall. The air is always cool there, and a fine view can be obtained of the Shwehmawdaw and other pagodas and the surrounding country. Big-game shooting in the hills to the West: duck-shooting at Pyinbongyi, 20 m. N. of Pegu.

From Pegu a line, 121 m. in length, runs through Kyaikto and Thaton to Martaban opposite Moulmein (p. 723).

The mail train to Mandalay, which leaves Rangoon at 6 P.M., passes through the **Toungoo** District of Lower Burma during the night, and in the early morning crosses the old British frontier into the Upper Burma District of Yamèthin. From Toungoo (166 m.

from Rangoon) a motor service leads ordinarily in $2\frac{1}{2}$ hrs. to the hill station of **Thandaung** (4500 ft. above the sea, D.B. and Circuit House). Early breakfast can be obtained at Yamèthin (R.) (275 m.), the headquarters of the District of that name, and breakfast at Thazi junction (306 m.). From Thazi a branch line to the W. runs to Meiktila (14 m.), the hqrs. of a Division, and Myingyan (70 m.). An extension (69 m.) from Myingyan to Palaik on the line to Mandalay (11 m. from that place) is approaching completion. The S. Shan States branch runs from Thazi through Kalaw (63 m.), Aungban (70 m.), to Heho (87 m. D.B.), amidst beautiful scenery. Between Pyinmana (225 m. from Rangoon) and Yamèthin, and thence on to **Kyauksè** (360 m.) is seen to the E. the fringe of the mass of hills which form the Shan States. In this hill-country, approached by a good motor road from Thazi, are **Taung-gyi** (D.B.), the headquarters of the Shan States Federation, and, at a slightly lower level, **Kalaw** (4292 ft.; D.B. and hotel). Both are increasingly used as hill-stations. Kalaw especially is a popular summer resort. There is a daily motor service, 22 m., from the railway station at Heho to Taung-gyi. The extension of the Southern Shan States railway from Heho to Shwenyaung (10 m. from Taung-gyi), is now open to traffic, but visitors to Taung-gyi will save much time by leaving the train at Heho, as previously, and proceeding by motor-car or lorry. (Hire of whole car, Rs. 15-20; fare of seat in motor-lorry, Rs. 2, ans. 8.)

The Kyauksè District contains the most complete example of Burmese irrigation works to be found in Burma. The main lines of the original system (11th century) have been preserved. The cultivator can obtain two crops of rice and sometimes three

or four crops (not all rice) annually from the same ground. Here the hills approach much nearer to the railway and **Kyauksè** itself (359 m., R.; and D.B. $\frac{1}{2}$ m. from the railway station, and a well-appointed Circuit House) is picturesquely situated. There is the elephant procession at an important festival in October. The **Shwethalyaung Pagoda** on the top of the hill overlooking the railway station was built by King Anawrat'a about 1028 A.D. Many old pagodas and remains of old cities are scattered throughout the District but none are of great archæological interest. Shans, with pack caravans, visit Myittha, about 12 m. S. of Kyauksè, and considerable trade still comes through from the Shan States despite the construction of the railway. Big game is found in the hills: there are good snipe grounds in the Kyauksè district.

After leaving Kyauksè, the train crosses a stream running to Ava, and passing through Amara-pura (p. 712), reaches

386 m. **MANDALAY** * station (lat. $21^{\circ} 59'$, long. $96^{\circ} 6'$; altitude 248 ft., D.B.). Several days can be spent very pleasantly at Mandalay.¹ Visitors should stay at the **Dak Bungalow**, and take their meals at the Ry. Stn. The city and Cantonment together contain 148,917 inhabitants, mostly Burmese. Mandalay was from 1860 until 1885 the capital of the Burmese kingdom and the residence of the King. Its growth at first was more rapid than that of Rangoon, but this was in great part due to temporary causes, and its population has declined by about 40,000 since 1891, whereas

¹ The little work, *Archæological Notes on Mandalay*, by Taw Sein Ko, I.S.O., Superintendent, Archæological Survey, Burma (1917), contains a scheme for three days' sight-seeing at Mandalay and Amarapura. See also *Mandalay and other Cities of the past of Burma*, by V. Scott O'Connor. (Hutchinson, 1907.)

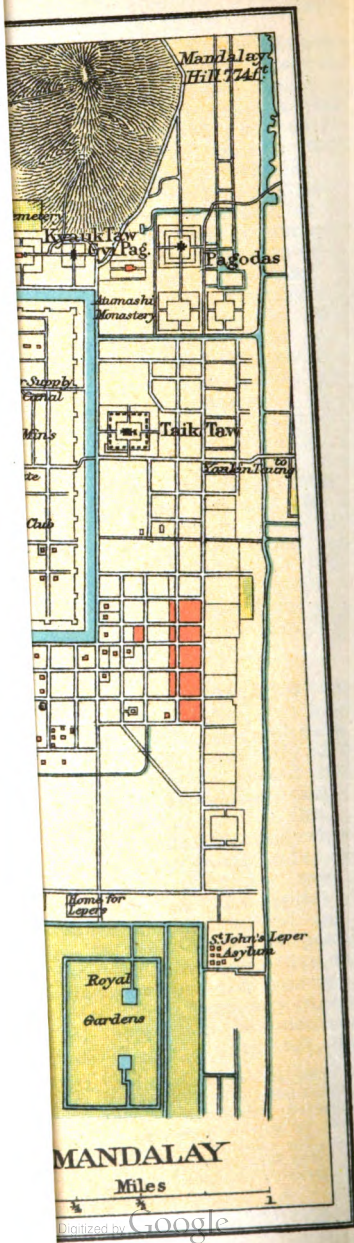
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that of Rangoon has increased by 160,000 in the same period. The city proper was in Burmese times within the walled enclosure, which is now used as a Cantonment and called *Fort Dufferin*.

The ascent should first be made of **Mandalay Hill** (954 ft.)—an isolated mound rising abruptly near the N.E. corner of the fort. From this point of vantage can be seen spread out like a great map the town, the fort with the Palace in the centre, the temples and monuments worthy of a royal city, and the system of irrigation built by King Mindon. At the summit of the hill was formerly a wooden temple containing a huge standing figure pointing with his finger at the Palace beneath. This temple and the figure were destroyed after 1885 by fire. The new temple has a covered way to it with an incongruous roof of corrugated iron. A new building has also been erected on the Southern spur of the hill to contain the Buddha relics sent over from India.

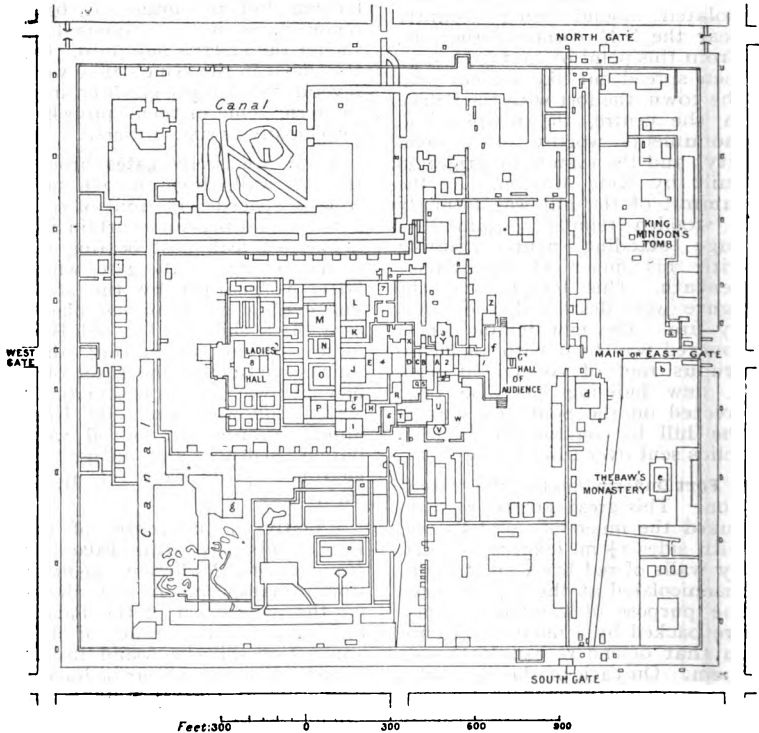
Fort Dufferin next claims attention. This great square, built to guard the inner city and Palace, with sides $1\frac{1}{2}$ m. long, is enclosed by walls of red brick 26 ft. high, machicolated at the top to serve the purpose of loopholes. They are backed by a mound of earth, so that defenders can look over them. On each of the four sides stand, at equal distances, thirteen peculiar and elegant watch-towers of Burman design, built of teak and freely ornamented with gold. One on the N. side, enclosed and enlarged, forms the nucleus of **Government House**, the residence of the Governor when at Mandalay. Outside the walls, and surrounding the fort, is a broad **Moat** full of water, 75 yards wide. It is crossed by five wooden bridges, one in the middle of each side, and an extra one on the W. face which was formerly re-

served for funeral processions. It abounds with fish, and at certain seasons of the year large patches of the surface of the water used to be covered with the broad circular leaves and beautiful pink and white flowers of the lotus plants which have their roots at the bottom, but the lotus has been removed, as it was supposed to shelter the malaria mosquito. On this moat in the King's time were several state barges, gilt from stem to stern, some of them propelled by as many as sixty rowers.

There are twelve **gates** through the fort wall, three on each side, equally spaced. In front of each gate stand a masonry curtain and a massive teak post bearing the name and sign of the gate, which latter is guarded by the stone image of a guardian *nat* placed in a brick shrine. The old Burmese custom of burying alive human victims at the gates of a new city was not, as is sometimes stated, followed here. By King Mindon's order jars of oil were buried instead, and images of guardian spirits were set up in shrines.

Exactly in the centre of the fort stands the royal **Palace** or *Nandaw*, brought here in the main from Amarapura. A plan showing the disposition of the Palace buildings at the time of the annexation will be found in Mr Oertel's *Notes on a Tour in Burma* (Government Press, Rangoon, 1893). The plan given on p. 708 is reproduced by permission from the Archaeological Survey Report for 1902-3. The Palace was formerly a square fortified enclosure, defended by an outer palisade of teak posts 20 ft. high and an inner brick wall, with an open esplanade of about 60 ft. width between them. This walled square was cut up into numerous courts surrounded by high walls, and in the very centre, to make it as secure as possible, was an inner enclosure

THE PALACE, MANDALAY.



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- A. } Zetawun Figures of the royal ancestors were kept here.
 - B. }
 - C. } The King held his morning levée. It is an open passage between two rooms, in the
 - D. } Western of which, D, the King was seated with his attendants.
 - E. } The Glass Palace. The Western half is one large room. The Water-feast Throne stands at the West side of the room.
 - F. Nursery.
 - G. Daily attendance room for Queens.
 - H. King and Queen's special living-room.
 - I. Kind of drawing-room where the court met to witness theatrical displays in the theatre on the south side. The stage is now cleared away.
 - J. Originally the Queen's room. Thibaw's eldest child was born here, but Supaya Lat never regularly inhabited it.
 - K. Tabindaing House.
 - L. Seindon House, residence of Dowager Queen.
 - M. Northern Palace
 - N. Western " }
 - O. Southern " }
 - P. } Houses made over to inferior Queens in King Mindon's time, in Thibaw's to Princesses.
- The road running down the centre East and West was called the Samök Road, and led to a courtyard called Samök, in the centre of which stood the Lily Throne. The houses on the North and South of this courtyard were inhabited by inferior Queens in King Mindon's time, and by Princesses in King Thibaw's.
- Q. King's private Treasury.
 - R. }
 - S. } Quarters of personal Bodyguard.
 - T. An evening sitting-room.
 - U. Privy Council Chamber.
 - V. Observatory Tower. Favourite resort of Supaya Lat; here she watched the British troops enter Mandalay.
 - W. New house built for, but never used by, the white elephant.
 - X. Cut up into various small rooms.
 - Y. Byëdaik, or Treasury Office, where Atwin Wuns, or Privy Councillors, sat.
 - Z. House for Pwës. The open space east of Z was used for races and various sports on horseback.
- a. Clock Tower, where gong and drum sounded the watches.
 - b. Also a high tower in which a tooth of Gautama Buddha was enshrined.
 - c. King Mindon's Tomb.
 - d. Hluttaw, or Supreme Council Hall (demolished), and Lion Throne removed to Calcutta Museum.
 - e. Richly decorated Monastery, on the site of which King Thibaw spent the period of his priesthood.
 - f. Golden Spire over Great Audience Hall.
 - g. The South Garden Palace, a kind of picnic house for Thibaw. In the front veranda he was taken prisoner by Col. Sladen in November 1885.
- 1. Lion Throne, under spire in Great Audience Hall.
 - 2. Goose Throne, in Ancestral Hall.
 - 3. Elephant Throne, in the Byëdaik.
 - 4. Bee Throne, in the Glass Palace.
 - 5. Conch Throne, in the Morning Levée Hall.
 - 6. Deer Throne, in the South Hall.
 - 7. Peacock Throne, in the North Hall
 - 8. Lily Throne, in Ladies' Hall.

containing the Palace. To the N. and S. of the inner Palace enclosure are two walled-in gardens, containing royal pavilions, and laid out with canals, artificial lakes, and grottoes. The outer stockade, except in a few places, and all the brick walls have now been removed, as also many of the minor structures; the chief Palace buildings are, however, still standing.

Four strongly-guarded gates led through the outer defences. The large gates were only opened for the King; all other people had to squeeze through the red postern at the side of the Eastern gate in front of the Palace, which obliged them to bow low as they drew near the royal precincts. Upon entering the Eastern gate, a wide enclosure was crossed, which contained a number of subsidiary buildings—such as the armoury, printing-press, mint, quarters for servants and guard, the royal monastery, King Mindon's mausoleum, and the offices of a few of the highest officials. Beyond this was another spacious court in front of the Palace, at the Northern end of which races and sports used to take place before the King. In the centre of this court stands the great Hall of Audience, with the lion throne, projecting out boldly from the face of the Palace. The hall is 250 ft. across from wing to wing, but only 45 ft. deep. S.W. of it, at the back, was the stable where the Sacred White Elephant was lodged. The private part of the Palace is behind the hall on an elevated oblong platform in an inner enclosure, which was entered through two jealously-guarded gates on each side of the Hall of Audience. At the Western end of the Palace platform is a private Audience Hall, with the lily throne, where ladies were received, and between the two Halls of Audience are numerous wooden pavilions, formerly occupied by the various Queens and Princesses. Over the

lion throne rises the high seven-storeyed gilded spire or *shwepyathat*, the external emblem of royalty. It has been taken down and restored at great expense.

In the S. garden there was once a small pavilion, on the veranda of which King Thibaw surrendered to General Sir Harry Prendergast and Colonel Sladen on 29th November 1885. At the S.E. corner of the Palace platform is the lofty wooden tower from which the King used to view the city. The richly-carved Pongyi Kyaung to the E. of the Palace, where King Thibaw passed the period of priesthood, is worthy of notice. Hard by is King Mindon's mausoleum, a brick and plaster structure, consisting of a square chamber surmounted by a seven-storeyed spire. Mindon Min was buried here in 1878. The Palace buildings were for a time used for barracks and offices, but they were found unhealthy, and the troops were removed to the new barracks outside. The great Hall of Audience was used by the military as a Church. The Lily Throne Hall and surrounding buildings for some years afforded accommodation to the Upper Burma Club; but this was discontinued in the viceroyalty of Lord Curzon, who feared the risk from fire to this absolutely unique example of the old Burmese Palace built according to the traditional pattern. The necessity of protection is all the greater as experience in Ava and Amarapura shows that Burmese buildings perish in fifty to sixty years when at all neglected.

Pagodas and Monasteries.—The whole neighbourhood of Mandalay, Amarapura, and Ava is rich with splendid fanes. Some of the finest, including the *Atuma-shi*, or "incomparable" monastery, have been burnt down within the past few years; but the "730 pagodas," S.E. of the

Mandalay Hill remain, and should be visited, as also the **Queen's Golden Monastery** in A. Road and the **Arakan Pagoda**.

Facing the E. gate of the Palace is the Taik Taw Monastery of the Buddhist Archbishop, decorated with wonderful dragons. N. of it, at the S.E. corner of Mandalay Hill, is the Kuthodaw or **730 Pagodas**—a remarkable work. King Thibaw's father, anxious that the holy books of Buddhism should be recorded in an enduring form, called together the most learned of the priests to transcribe the purest version of the scriptures; this he caused to be engraved on 729 large stones of the same pattern. These stones were set up in an enclosed square, and over each was erected a small domed building to preserve it from the weather. The enclosure is about $\frac{1}{2}$ m. square, surrounded by a high wall with ornamental gates; in the centre stands a temple of the usual form. W. of this on the road to Mandalay Hill is the Kyauk Taw Gyi Pagoda, built over a huge monolithic image of Buddha.

The **Glass Monastery**, so called from the profusion of inlaid glass work with which the interior and exterior are decorated, was close by. It has been burnt down, but close to the remains of the Atumashi Kyaung, which was situated S. of the Kuthodaw Pagoda, there is the **Shwenandaw Kyaung**, which is worth seeing. It is so called because the materials for the building were obtained by dismantling the apartment occupied by King Mindon Min just before his death. The sanctuary is adorned with magnificent wooden carvings. The **Queen's Golden Monastery**, built by Supaya Lat, in A. Road across the railway to Mandalay shore, is the handsomest building of the kind in Burma. It is built of teak in the ordinary form, but is profusely

decorated with elaborate carving, and is heavily gilded within and without. Owing to the question of wearing boots, permission to inspect the interior of this monastery is not ordinarily given, but it can be obtained. On the road to it the gilded Eindawya Pagoda is passed; and not far from this was the picturesque structure known as the Serpent Pagoda, which was burnt down. To the S.E. of the city is *Maha Muni*, or "**Arakan Pagoda**," rendered especially sacred by the great sitting image of Gautama there preserved, and on this account regarded by Upper Burmans as not inferior in sanctity to the Shwe Dagon itself. The huge brass image, 12 ft. in height, was brought over the hills from Akyab in 1784. The image was originally set up, so says Shway Yoe, quoting the ancient legend, during the lifetime of the Great Master. The utmost skill and most persistent energy had failed in fitting the parts together, till the Buddha, perceiving from afar what was going on, and ever full of pity, came himself to the spot, and embracing the image seven times, so joined together the fragments that the most sceptical eye cannot detect the points of junction. So like was the image, and so sublime the effulgence which shone around during the manifestation, that the reverently-gazing crowd could not determine which was the model and which was the Master. The resemblance has no doubt faded away with the wickedness of later times, for, unlike most Burmese images, the features of this image are somewhat lacking in the customary refinement and dignity of pose. The shrine in which it stands is one of the most splendid in the country. The image itself is covered by a great seven-roofed *pyathai* with goodly pillars, the ceiling gorgeous with mosaics. Long colonnades, supported on 252 massive pillars, all richly gilt and

carved with frescoed roof and sides, lead up to it. All day long circles of constantly-renewed worshippers chant aloud the praises of the Buddha, and the air is thick with the fume of candles and the odours from thousands of smouldering incense-sticks. Within the precincts of the pagoda is a large tank tenanted by sacred turtle, who wax huge on the rice and cakes thrown to them by multitudes of pilgrims. Probably not even at the Shwe Dagon Pagoda is more enthusiastic devotion shown than here. The relics of Buddha discovered at Peshawar are in the Treasure-house of this pagoda.

The great Zegyo bazar lies near the centre of the city. A light Ry. runs from near here to Madaya, 14 m. N. Grain and vegetable vendors, silversmiths, toy, umbrella, and lacquer makers, silk merchants, and numerous other traders occupy streets of stalls. Burmese ladies in the usual tight-fitting petticoat of gay silk and white jacket, attended by a maid, may be seen making their daily household purchases; groups of girls, with flowers in their hair and huge cigars in their mouths, price the silks of which all Burmans are so fond. Many strangers to the city, come on business or pleasure, wander about deeply interested in the display on the stalls. Nowhere else can be seen gathered together so many widely-separated tribes — Chins from the western mountains, Shans from the E., Kachins from the N., Chinese from the little-known inland borders, Sikhs, Gurkhas, Madrassis, and other Indians, and the scene is as lively as it is uncommon. The bazar deserves several visits, and is, indeed, the best place in Burma for purchasing silks. Curious old specimens of silver work may also sometimes be picked up there. N. of the bazar is the Diamond

Jubilee Clock Tower, and the principal shops of Mandalay are in Street No. 22 on this side.

Excursions from Mandalay.

After exploring Mandalay proper, short excursions may be made to **Yankintaung**, to **Amarapura**, to **Sagaing** and **Ava**, and to **Mingun**.

The hills called **Yankintaung** are about 5 m. due E. from Mandalay, and may be visited by motor. There are a number of pagodas and monasteries, and a deep fissure in the ground containing an image of Gautama.

The train runs to **Amarapura Shore**, and **Sagaing** on the opposite bank is reached by ferry. **Ava** is on the same side of the river as **Amarapura**.

Amarapura, the Immortal city, founded in 1783, the capital till 1859, with an interval of 1822-1837, lies 6½ m. S. of Mandalay, and is easily accessible by motor-car. It is fully described in *Yule's Mission to Ava* and *Mr Scott O'Connor's Mandalay*. Only ruins now remain, but they are well worth a visit. Near the tower of the Palace there was a monster gun, which has now been removed to the Palace at Mandalay; the principal sights are the **Shinbinkugyi** and **Patodawgyi** pagodas, within the precincts of which there is now a collection of Burmese inscriptions collected from various parts of the country by King **Bodawpaya** about a century ago, and a colossal image of Buddha on the shore of the S. lake. The Station-master may provide a local guide. Near the station is a fine Chinese Temple. There also may be seen the Government silk-weaving works, where "Mandalay silks," of colours suitable for European purchase, as well as for Burman, may be bought.

¹ Bird's *Wanderings in Burma* contains many details of these.

Sagaing is a typical Burmese town on the right bank of the Irrawaddy; and the ruined city of **Ava** is nearly opposite. A steam ferry runs between the two places which were the capitals of Burma from 1636 to 1837, with short intervals. Sagaing is the Southern terminus of the railway to Myitkyina (p. 714), and communication with Mandalay is maintained by a steam ferry. A combined railway and road bridge is in course of construction, and completion is expected in 1933. From Sagaing a branch line runs to (79 m.) Monywa on the river Chindwin (see p. 730) and (136 m.) Ye-u. Little trace remains of the past glories of Sagaing and Ava, but on both sides of the river are hundreds of pagodas of every variety and degree of decoration. There are the *Nagayon paya*, the whole building wrought into the form of a dragon; the huge round-domed *Kaunghmudaw*, built in 1636, and with "glistening white pinnacles or flashing gold spires on the Sagaing Hills, and on the Amarapura side, great massive temples frowning over the river with all the stern solidity of a knightly hold, each with its legend—some tale of bloodshed or piety, some event in Burmese history, or birth story of the Buddha."

Sagaing (D.B.) is now the headquarters of the Commissioner of the Division and of the Deputy-Commissioner of the Sagaing District. The traveller who wishes to explore the pagodas of Sagaing and Ava should endeavour to obtain an introduction to one of these officers.

The last of the excursions near Mandalay deserving special mention is that to **Mingun**, about 9 m. above Mandalay. The up steamers of the Irrawaddy Flotilla Company call there, but the down steamers do not, unless by special arrangement. Mingun is picturesque situated, and is inter-

esting for its great unfinished pagoda and for its huge bell. The groundwork of the great misshapen Mingun Pagoda covers a square of 450 ft., and its height is 155 ft., about one-third of the elevation intended; but Bodawpaya, who attempted to break the Buddhist record of putting up the most gigantic monument, did not complete it, because a prophecy ran that its completion would portend disaster to his dynasty. In 1838 an earthquake rent the gigantic cube, the largest mass of brickwork in the world, with fantastic fissures from top to bottom, and cast down great masses of masonry, tons in weight. Overlooking the river, in front of the Eastern face of the temple, stood two gigantic leogryphs in brick. These figures were originally 95 ft. high, and each of the white marble eyeballs intended for the monsters measured 13 ft. in circumference. The leogryphs are now in ruins. N. of the temple, on a low circular terrace, stands the largest bell in Burma—the largest in the world, probably, after the one at Moscow. Its original supports were destroyed by the earthquake of 1838, and it rested on the ground till 1896, when it was again raised, and slung on an iron beam resting on two iron pillars, so that it swings free. An ornamental shed has been erected over it. The dimensions of the bell are as follows:—

External diameter at the lip	16 ft. 3 in.
Internal diameter at the lip	10 ft.
Internal diameter above the lip	4 ft. 8 in.
Exterior height	12 ft. 6 in.
Interior height	11 ft.
Interior diameter at top	8 ft. 6 in.

The thickness of the metal varies from 6 in. to 12 in., and the actual weight is, roughly, 87 tons. There are other curious pagodas in the neighbourhood.

Mandalay to Maymyo and Lashio by Rail.

The railway line from Mandalay to Lashio (180 m.) makes

it possible to visit **Maymyo** and the **Gokteik Viaduct**. Maymyo (42 m., D.B.), is also connected with Mandalay by a motor road, only a 2-hrs. journey, and most people travel this way. The town stands 3400 ft. above the sea, and is the hill station of Burma. It lies in a trough between low, wooded hills, pretty, but without wide views. There are a large English society, many excellent houses and gardens, a good Club, with polo-ground, a Golf-course and excellent rides in the jungle. The hot-weather temperature is fully 20° below that at Mandalay.

At Gokteik (83 m. from Mandalay) is a wonderful steel trestle-bridge, 320 ft. high and 2260 ft. long, built on a natural bridge of rock over 500 ft. high, with a great cavern under it. The bridge was prepared in America, and was put up on the spot by American workmen. There are Rest-houses belonging to the railway near the station with beautiful views (application to be made to Stn. Master, Maymyo). On previous advice being given to the butler in charge of the Gokteik Rest-houses, arrangements will be made for providing meals, according to a fixed tariff. The scenery on the way and at Gokteik is fine. It is worth while descending the 900 ft. by a good path to the cavern, through which the river flows under the two bridges, i.e., the so-called natural bridge and the viaduct built on it.

The visitor will find that a trip to the **Shan States** will repay the extra time and money involved. Beyond Gokteik is Hsipaw, 129 m. from Mandalay. Here the Shans predominate. At 157 m. the Mansam Falls are passed, where the Burma Corporation have an electric installation for working their large mining areas at Bawdwin and Namtu (silver and lead). At Nam Yao is a light ry. branch for Namtu ;

and the main line ends at **Lashio** (golf-course) the hdqrs. of the N. Shan States. The effect of the cherry-tree blossom here in Jany. and Feby. is very pretty ; and the market, which is attended by various Hill Tribes and Shans, is worth seeing. Taxis are available at Lashio for excursions. (1) Namhkan, due N., on the Chinese border, can be reached within a day. (2) Tangyan, 87 m. S.E., leads to the ridge overlooking the Salween. (3) Mongyai in the South Hsenwi State, 56 m. S., is a starting-point for visiting the S. Shan States en route for Taung-gyi and Kalaw (p. 706). Curios can be picked up almost everywhere on the market days.

Mandalay to Bhamo and Myitkyina.

The visitor who has time to proceed farther N. beyond Mandalay may either take one of the Irrawaddy Flotilla express steamers, which leave Mandalay every Friday morning for Bhamo (returning from Bhamo every Monday morning), or he may cross over to Sagaing (394 m. from Rangoon) by the ferry, and take the train. In the latter case he will be able to reach **Myitkyina**, 724 m. from Rangoon, passing through Shwebo (446 m.), Naba junction (592 m.), and Mogaung (688 m.) The railway journey from Sagaing to Myitkyina by rail takes about 25½ hours, meals being obtainable at Shwebo and Naba. No steamers ply between Myitkyina and Bhamo except Government launches, which do not run on fixed dates, and are not available for ordinary travellers. If it is desired to visit Bhamo, the train must be taken to Naba Junction whence there is a short branch (14 m.) to **Katha** on the river-bank ; and here the steamer for Bhamo (p. 715) can be caught.

About 2 hrs. before reaching

Myitkyina by rail, **Mogaung** is passed. This is the starting-point of the bridle-path to the *Jade Mines*, 80 m. to the N.W.

Myitkyina is on the right bank of the Irrawaddy, which in the dry months here runs clear as crystal and contains many sporting fish. To the E. high mountain ranges divide the District from China, the nearest point on the frontier being about 30 m. from Myitkyina as the crow flies. A fairly good bridle-track connects Waingmaw on the left bank of the Irrawaddy with Tengyueh.

Many types of hill peoples may be seen in the bazar at Myitkyina. The bulk of the population consists of Kachins, whose homes are in the hills; the plains are as yet sparsely populated, but are gradually attracting settlers. The climate at Myitkyina from the middle of November till the end of February is delightful, and English flowers, fruit, and vegetables thrive. The P.W.D. Inspection Bungalow is available for the use of travellers when not required by officials, but visitors must make their own arrangements for food. The town itself presents no special features of interest.

The steamer route to Bhamo and back (2½ days up and 2 days down) is recommended. (Messing, 1st class, Rs. 6½ per day.) The steamers are well fitted, and the scenery is fine. Passing Singu on the right and Sheinmaga and Kyaukmyaung (75 m. from Mandalay) on the left, the steamer passes through the **third defile** to Thabeikkyin and Kyanhnyat. Tigyaing, on the left bank, is prettily situated on a hill. Katha is next passed on the left. It is the headquarters of the District of that name; a daily steamer to and from Bhamo (70 m.) may be joined or left here and the train taken (p. 714). The pagodas of Shwegu (55 m. from Bhamo) next come into sight on the right, and on

Royal Island in the river, and the steamer then passes through the **second defile** to Bhamo.

The **defiles** of the river as Bhamo is approached are very fine. (The first defile is above Bhamo, a gloomy gorge 35 m. in length, through which steamers do not go, and launches only in the dry season.) The second defile is one of the great spectacles of the world, but the third is also beautiful. The wide stream narrows to 1000 yds., and flows for 30 m. through a chain of hills covered with splendid foliage. The successive reaches of the river resemble lakes, being apparently shut in all round. Beyond the first hills is a plain, and then the second defile through another chain of hills, which is even finer than the last. The river narrows to 200 or 300 yds., and rushes through the gap with great velocity. This defile extends for 5 m., and in the centre the towering Elephant Rock crowned by a golden pagoda, rises straight out of the water to a height of nearly 400 ft. In spite of this narrow approach, the steamer service to Bhamo is maintained at all times of the year.

Bhamo (pop. 7741—Burmans, Shans, Chinamen, Kachins, Indians, and every sort of intermixture) is of interest as being the starting-point of the main trade-route into China, the nearest point on the Chinese frontier being only some 30 m. distant. Business is largely in the hands of Chinese and the transport is by mule caravans. There are no hotels or rest-houses, and visitors should remain on board the steamer. The Theindawgyi Pagoda resembles those of Siam in shape, and a Chinese Joss-house will be interesting to those who have not seen the farther East. Just outside Bhamo is the site of the old city of San-pa-na-go; portions of the walls still remain. This is probably the place re-

ferred to in Fra Mauro's map as the place where "goods are transferred from river to river and so pass on to Cathay." The District is largely inhabited by Kachins, wild hillmen, who in Burmese times were practically independent, and were a constant source of terror to the caravans passing between Bhamo and China. The Kachins have long been reduced to order.

Bhamo to Mogok and Mandalay.

In order to visit the *Ruby Mines* on the return journey by steamer, it will be necessary to break the journey at Thabeikkyin, in the Katha District (115 m. from Mandalay). A good road connects Thabeikkyin with **Mogok** (60 m. E.), and the journey is well worth undertaking. There is a daily motor service running through in 4 to 6 hrs. The road passes through fine mountain scenery, and the journey can be broken at D.Bs. at intervals of 12 m. Fifty m. from Thabeikkyin the road crosses a pass 5000 ft. high and descends into the Mogok Valley, which forms a cup in the hills about 10 m. long by 2 m. broad. The mines, which are in the valley, are worked partly by the Ruby Mines Company, with the assistance of the most modern methods and machinery, and partly by a large number of indigenous licensees, who work hand-mines by primitive methods. In the Company's mines the system followed is one of open workings. Some thirty Europeans and Anglo-Indians, and a very large number of Burmese and Shan-Chinese are employed on the works in the various processes of mining, washing, and sorting. The Company's mines are lighted and their machinery run by electricity. By arrangement with the Indian Government the Company secured a lease

for 28 years in payment of a minimum rent of Rs.200,000, and a royalty of 30 per cent. of the net profits. The annual out-turn of precious stones is about 200,000 carats. The Company has extended its workings to Luda and Katha, 7 m. from Mogok on the road from Thabeikkyin. Besides rubies, sapphires, topazes, amethysts and several other stones, both uncut and polished, are to be had.

Within easy access from Mogok or Thabeikkyin, (D.B. at each, with care-takers and food) there is good big-game shooting—leopards, tigers, elephants, *saing*, bison, and *sambhar*; but the country is difficult and, during the rains, malarious.

About 50 m. above Thabeikkyin Tagaung is reached on the bank of the Irrawaddy, one of the oldest and most important capitals of Burma, sometimes spoken of as old Pagan. As Tagaung ceased to have any importance some hundreds of years ago, there are no ruins to be found, though the mounds in the marshes near it will probably in the future yield important results to the antiquarian.

Mandalay to Prome.

Having returned to Mandalay, the visitor should proceed by Flotilla steamer to Prome (express steamer, Sundays and Thursdays, 3 days), stopping *en route* at Nyaungu for Pagan, and at Yenangyaung for a visit to the oil-wells. After passing Sagaing the steamer calls at **Myingyan** and **Pakokku**, both large thriving towns and hdqrs. of British districts. Myingyan is the terminus of the branch railway from Thazi (p. 706), and is an important trading centre, especially in cotton. Pakokku is the base for the Chindwin River (p. 730) and the Chin Hills.

Nyaungu is situated about 120 m. below Mandalay, on the

E. bank of the river, and is interesting both as being one of the principal places for the manufacture of the celebrated Burmese lacquer work,¹ and as being the nearest halting-place to Pagan, the capital of Burma from the 2nd to the 13th century, where even better lacquer work can be obtained than at Nyaungu. There is a small Government Circuit House at Nyaungu, and a large one at Pagan, near the principal pagodas. Permission to occupy these should be obtained from the Deputy-Commissioner at Myingyan. Messing is arranged for at the Pagan Circuit House, which is 5 m. from the steamer landing-place at Nyaungu, and can be reached by bullock-cart or country boat. The smaller ferry steamers call daily at Pagan and Nyaungu; but no messing is provided. The visitor who wishes to make anything like a detailed examination of the extensive and very interesting remains in the immediate neighbourhood should arrange to remain at least two days in each. A pretty full description of the pagodas at Pagan will be found in Yule's *Mission to Ava*, in Bird's *Wanderings in Burma*, in Scott O'Connor's *Mandalay and other Cities of the Past of Burma* (Hutchinson, 1907), and in the publications of the Burma Archaeological Department. See also Taw Sein Ko's *Guide to Pagan*, and C. M. Enriquez's *Pagan*. A very brief account (taken chiefly from Yule) of some of the principal monuments is all that can be given here.

The **Pagan** ruins extend over a space about 20 m. in length along the river, and averaging about 5 m. in breadth. The brick rampart and fragments of an ancient gateway, showing almost obliterated traces of a highly architec-

tural character, are the only remains which are not of a religious description. It is said that in the days of the glories of Pagan there were nearly 13,000 pagodas and monasteries. The remains of over 5000 can still be traced. All kinds and forms are to be found among them; the bell-shaped pyramid of brickwork in all its varieties; the same raised over a square or octagonal cell containing an image of Buddha; the bluff knob-like dome of the Ceylon dagobas; the fantastic *Bupaya*, or Pumpkin Pagoda, and many variations on these types. But the predominant form is that of the cruciform, vaulted temple. One hundred and thirty-six of these pagodas are under the custody of Government *darwans*, and the more important—N., Kaukathan; E., Gawnagôn; S., Kathaba; W., Gautama—are kept in repair by the Public Works Department. The three principal temples are the Ananda, the Thatbyinnyu, and the Gawdawpalin, all close together near the S. side of the city and nearly 5 m. distant from Nyaungu.

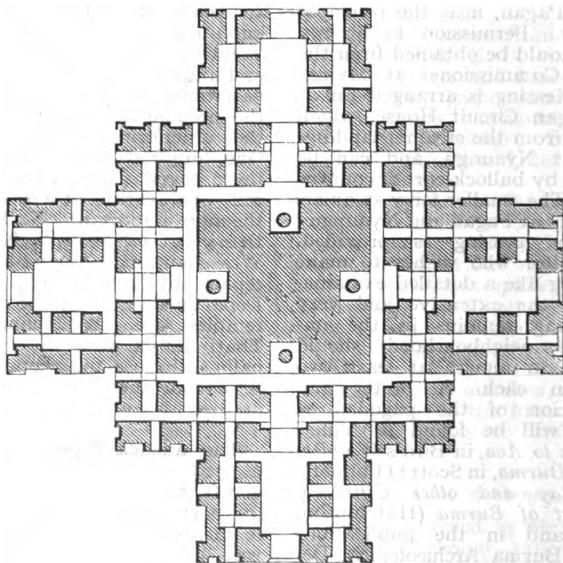
The **Ananda Pagoda** (see plan, p. 718) is a square of nearly 200 ft. on each side, with projecting portions on each face, so that it measures 280 ft. across each way. It is seven storeys in height; six of these are square and flat, each diminishing in extent, so as to give the whole a pyramidal form; the seventh, which is, or simulates, the cell of the temple, takes the form of a Hindu or Jain temple, the whole in this instance rising to the height of 183 ft. Internally the building is extremely solid, being intersected only by two narrow concentric corridors; but in rear of each projecting transept is a niche, artificially lighted from above, in which stands a statue of Buddha more than 30 ft. in height. These four great statues

¹ A full description of the process of manufacture will be found in chapter 27 of *The Burman*, by Shway Yoe.

represent the four Buddhas who have appeared in the present world period—viz.: E., Kaukathan; W., Kathaba; N., Gautama; and S., Ganugun. They are all richly gilt. The Ananda was built in the 11th century, in the reign of Kyanzittha. The name is perhaps derived from *Ananda*, the favourite pupil of Buddha, or more probably from

of the Gawdawpalin 180 ft. They differ from the Ananda in having each only one porch instead of four, and consequently only one great statue in its cell instead of four standing back to back. A plan of the Thatbyinnyu is given on p. 719.

Another important temple within the city walls is known as the *Maha Bodhi*, and was erected



Plan of the Ananda Temple (from Yule). Scale 100 ft. to 1 in.

nanda, meaning "admirable," the prefixed "A" being only an intrusion (see Fergusson's *Ind. Arch.*, 2, 360).

Next in importance is the **Thatbyinnyu** (the Omniscient), erected about the year 1100 by the grandson of Kyanzittha, and third is the **Gawdawpalin** (Throne of the Ancestral Hall) built in 1200. These two temples are of very similar form, but the Thatbyinnyu is considerably larger. The height of the Thatbyinnyu is 201 ft., that

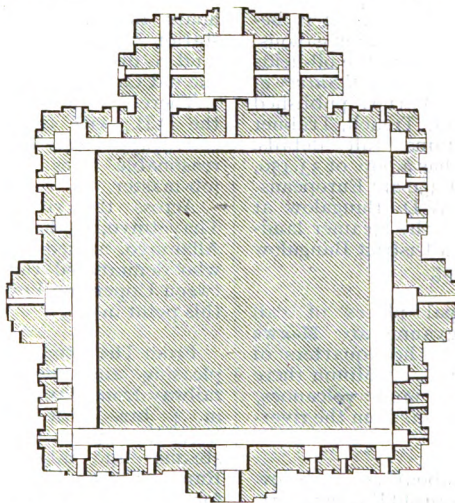
about 1200 by King Nandaungmya. It is different in style from the other temples. The basement is a quadrangular block of no great height, supporting a tall spire, strongly resembling the original temple of Buddh Gaya (p. 58). Both base and spire are covered with niches, bearing seated Gautamas and interspersed with ornamental panels and mouldings.

Among other temples the more interesting are a monastery in the Ananda containing frescoes; the

Manuha Pagoda, which contains a huge reclining image of the Buddha; the Nagayon, in which the "Nagas" guarding the figure indicate the influence of snake worship on the Buddhism of the period; the Nanpaya, where the captive Talaing King Manuha was in Anawrata's reign allowed to hold a subordinate court, and which contains representations of Brahma with the triple head; the Mingalazedi, noted for its

terraces; the hall in the centre of it contains a statue of Buddha, which, like the decoration of the temple, is of Indian type.

Pagan fell in 1284 A.D. The Emperor of China sent a vast army to avenge the murder of an ambassador. The Burmese King pulled down 1000 pagodas, 10,000 smaller ones, and 400 square temples to build additional fortifications from Palin on the N. to Ywatha on the S., but a prophecy found under one



Plan of Thatbyinnyu (from Yule). Scale 100 ft. to 1 in.

glazed tiles depicting scenes in the previous existence of Gautama. The excavations round the *Pet leik paya* have brought to light a series of Buddhist terra-cotta reliefs. There is a local museum of these and other remains at the Ananda. Between Pagan and Nyaungu, on the road which follows the river, is the fine **Shwe-zi-gon Pagoda**, near which many workers in lacquer reside: the surroundings are extremely picturesque. $2\frac{1}{2}$ m. N. of Nyaungu by a bad road is the **Kyaukku Temple**. This is built in three

of the desecrated shrines robbed him of his courage. He fled to Dala on the S., and Pagan was sacked by Kublai Khan's warriors, and never recovered its pristine splendour and magnificence.

The Irrawaddy just below Pagan widens out like a gigantic lake to over 2 m. in breadth, and the view of the sacred city obtained from the steamer is particularly fine.

Continuing his course down stream past Salemyo, the visitor will shortly reach **Yenangyaung**, on

the E. bank. The oil-field, a veritable forest of some 8000 derricks, is situated about 3 m. from the river-bank, and well deserves a visit. Oil-winning by primitive Burmese methods is still practised, but in recent years several Companies, the largest being the Burma Oil Company, have acquired sites on the field, and by adopting the American system of wells, drilled to a depth of over 3150 ft., have obtained an enormously increased production. The annual output of oil is between 250 and 270 million gallons. Mr Pascoe's report on the oil-fields of Burma (*The Geological Survey of India*, Vol. XL., Part I., published by Kegan Paul, Trench, Trübner & Co.) contains full details. Yenangyaung has a pop. of 33,450, of whom about 350 are Europeans. There is a P.W.D. Bungalow at Thittabwe near the steamer landing-place, and a District Bungalow at Yenangyaung.

The principal places of call below Yenangyaung are **Magwe** and **Minbu**, both headquarters of British districts. At Minbu there are interesting mud volcanoes, situated about 2 m. from the river-bank.

At **Minhla**, about 20 m. below Minbu, there is an old Burmese fort, the scene of a brief fight in the last Burmese war. Soon after crossing 19° 29' 3" parallel of latitude (the old frontier formerly indicated by masonry pillars and inscriptions, specimens of which are preserved in the office of the Deputy-Commissioner, Thayetmyo) the cotton-mills of Allanmyo may be seen on the left, erected to cope with a growing industry. On the right, almost opposite, another mill will be noticed, and a little S. of it the old British fort, used as a camp for Turkish prisoners of war in 1915.

Thayetmyo (D.B.), like Toungoo,

is an old frontier station. There is an excellent 9-hole golf-course. Permission to play can be obtained from the Hon. Secy., Thayetmyo Gymkhana Club.

The down mail steamer arrives at Thayetmyo on Wednesdays and Sundays in the cold season, and on Mondays and Fridays during the rainy season. The down ferry steamer calls daily except Tuesdays, and takes up passengers for Prome. It is thus possible to spend twenty-four hours in perhaps the prettiest station in Burma. The park-like land S. of the fort is a portion of the old Cantonments.

There is accommodation at the D.B., with fair cooking, and conveyances can be procured at reasonable rates from the local job-master.

Across the river and facing Thayetmyo, is the small town of Allanmyo, named after the officer who demarcated the frontier between Upper and Lower Burma at this point in 1853.

From Thayetmyo the scenery is pleasing, and **Prome** (161 m. by railway from Rangoon) is reached in 4 hrs. The traveller has here the option of leaving the steamer and taking the rail to Rangoon (9 hrs.), arriving in time for early breakfast next morning.

The river journey to Rangoon takes three days (p. 723).

The only accommodation for visitors at Prome is a small travellers' bungalow, at which meals can be obtained. Dinner can be obtained on board one of the steamers that remain at Prome over night, either on a mail-boat or on the daily ferry-steamer. As there is no refreshment-room at this station, most passengers by the night-train to Rangoon find it convenient to dine on board the boat.

Prome town (pop. 371,575), the headquarters of the district

of the same name, is situated on the E. bank of the Irrawaddy River. The old town was entirely destroyed by fire in 1862 and the buildings are modern. The Strand Road extends from one end of the town to the other, and from it well-laid-out streets run E., intersected at right angles by others. Close to the centre of the town are the Court Houses, the Anglican Church, the School, the Hospital, the Jail, the Market, the Jubilee Clock Tower, and the Post and Telegraph Offices. The Municipal Waterworks, opened in 1885, supply the town with water from the river. Most of the residences of officials are on the hill just to the S. of the town, which is accessible by a good metalled road, and affords a fine view of the town and neighbourhood.

It is a very ancient city, and is mentioned as the capital of a great Kingdom before the Christian era. The original capital was Thayekhettaya, of which the ruins extend for about 10 m. in every direction from Hmawza rly. stn. (6 m. from Prome on the line to Rangoon). Remains exist of massive brick walls and of embankments, pagodas, walled enclosures and burial-grounds. Important excavations are in progress, and interesting discoveries have been made. The place was destroyed by the Talaings in the 8th century, and the town of Prome, which was then founded, became one of the chief centres round which the early people of the country struggled for the mastery of Burma. In the war of 1852 it was captured and occupied by the British, out of whose hands it has not passed since. The principal industries are the manufacture of silk cloth, gilt boxes, and lacquer-work. The chief objects of archaeological interest are two pagodas—Shwesandaw in Prome town and Shwenattaung 16 m. from it.

The Shwesandaw Pagoda is on a hill $\frac{1}{2}$ m. from the left bank of the Irrawaddy, and covers an area of 11,925 sq. ft., rising from a nearly square platform to a height of 180 ft. It is surrounded by 83 small gilded temples. These unite at their bases and form a wall round the pagoda, leaving a narrow passage between it and them. There are four approaches to the platform on which the pagoda stands. The N. and W. are covered in with ornamented roofs, supported on massive teak posts, some partly gilded and partly painted vermilion. The platform on the top of the hill has been repaved with slabs of Italian marble, and round its outer edge are carved wooden houses, facing inwards, interspersed with small pagodas, in which are figures of Gautama standing, sitting, or lying. Between these and the main pagoda are many Tagundaing posts with streamers, and the largest collection of bells in Burma, some of them of great antiquity. The pagoda has two gigantic lions of conventional form at the N. entrance. In 1753 A.D. this pagoda was regilt by Alompra; in 1841, King Tharrawaddy had it repaired and regilt, and surmounted with a new *hti*, or crown of iron, gilt and studded with jewels; in 1842 the carved roofs over the N. and W. approaches were put up by the Governor. In 1858 the pagoda was again repaired, and later regilt. In 1916, two new *htis*, with the usual costly ornamentations were substituted for the old Burmese and Talaing *htis*, the frameworks of which are now to be seen in a building on the platform. Through the efforts of a local religious association the pagoda is now lit by electricity. The annual festival, when the pagoda is visited by thousands of pious Buddhists, is held in November. Europeans do not now enter the precincts of the pagoda.

The Shwenattaung Pagoda.— This pagoda, 16 m. S. of Prome, richly gilt and glittering in the sun, stands out conspicuously on the first hill of a low range, overhanging the Shwenattaung plain, and has in a line behind it several other pagodas, all of which may be visited by the traveller, if not already tired with buildings of the kind. The Shwenattaung is said to have been built during the reign of the founder of Prome by his Queen. It was repaired and raised by Tihathu, King of Prome, and again in the 16th century by Tabin Shweti, King of Toungoo, who had conquered Prome. Its eight-day festival in March is attended by thousands. The pagoda can ordinarily be reached from Prome by motor. There is no accommodation for travellers at Shwenattaung and the vicinity.

Prome to Rangoon by Rail.

The mail train leaves Prome at 9.30 P.M., and reaches Rangoon at 6.38 A.M. The Irrawaddy Flotilla Company provide a daily service from Prome to Yenangyaung and from Prome to Henzada, and a tri-weekly service from Prome to Rangoon and from Prome to Mandalay, stopping at the river-side stations.

From Letpadan (84 m. from Prome, 73 m. from Rangoon) a branch line runs to (23 m.) Tharraway Shore, whence there is a ferry to Henzada shore, 3 m. from Henzada Junction. The line continues (83 m.) to Bassein (Route 4). A branch line runs N. (147 m.) from Henzada to Myonaung (p. 723) and Kyangin.

Henzada town has a large D.B. for travellers, in addition to a Circuit House, and a P.W.D. Bungalow. Permission to occupy them must be obtained from the Deputy Commissioner and the Executive Engineer, Embankment Division,

Henzada, respectively. All are fully furnished. The District is also well equipped with bungalows, which would prove useful to hunters of big game, which abounds 15 m. to the W. of the Henzada to Kyangin Railway. As shooting grounds are almost all situated within reserved forests, permission to shoot and a licence must be obtained from the Deputy Conservator of Forests. There are no antiquities worth seeing, and the District roads are bad. There are daily steamers to Prome and trains thrice daily to Rangoon, Henzada being the half-way house on the rail between Rangoon and Bassein. 9 m. S. of Letpadan on the main line is **Tharrawaddy** (93 m. from Prome, 69 m. from Rangoon), headquarters of the Tharrawaddy District (pop. 49,242). It lies between the range of hills known as the Pegu Yoma on the E., the Irrawaddy River on the W., the Prome District on the N., and the Insein District on the S. Its centre is traversed by 70 m. of the Rangoon-Prome Railway. Also the Myit-maka River, farther Southward, known as the Hlaing, or Rangoon River, traverses the District, which is mainly agricultural. It contains extensive forests on its Eastern side; teak and other timber are extracted by Government agency.

At Myodwin, 8 m. from Gyobingauk station (52 m. from Prome, 109 m. from Rangoon) there are the remains of a fort built three centuries ago by a Prince named Thadomingaung, or Thônmyoyin (*i.e.*, lord of three towns), to whom at that time Paungde, Tharrawaddy, and Toungoo owed allegiance. The District formed part of the Talaing Kingdom of Pegu and became Burmese when Alaungpaya conquered Pegu in 1753. In the first half of the 19th century it was part of a fief of the prince who, by deposing his brother from the Burmese throne, became King of Burma as the Tharrawaddy Min, or the Shwebo Min, and

reigned from 1837 to 1846. The District has long held an unenviable reputation on account of the criminality of its inhabitants.

There are Inspection Bungalows at all township headquarters and principal railway towns: but, except at Tharrawaddy itself, the traveller must be prepared to make his own arrangements for food.

Prome to Rangoon by River Steamer.

If the journey from Prome to Rangoon (311 m.) by river steamer is chosen, the first place of call is (55 m.) **Myonaung**, hdqrs. of a subdivision and a station on the railway line from Henzada to Kyangin. Shortly before it is reached, the steamer passes Gaudama Hill, with a highly sacred pagoda on the crest, and ancient and minutely-carved figures of Buddha cut in the face of the cliff. 60 m. farther on is **Henzada** (p. 722), the centre of a large rice-growing district. 44 m. from Henzada is **Danubyu**, now famous for the production of a superior quality of Burma cigar; it was the scene of an encounter with the Burmese in 1824, when Maha Bandula was killed (p. 689). **Yandoon**, 16 m. lower down, is the centre of the *ngapi*, or salt-fish industry. 50 m. separates it from **Maubin**, where the steamer from Rangoon to Bassein (Route 4) can be taken. **Dedayai** is the next halt, 53 m. from Rangoon.

ROUTE 2.

From **RANGOON** to **MOULMEIN**, and thence by steamer to **Tavoy** and **Mergui**.

Moulmein town (pop. 61,301), justly described¹ as the most beautiful town in Burma, should on no account be missed. It is

¹ *The Silken East*, by V. C. Scott O'Connor (Hutchinson, 1928).

comfortably reached from Rangoon by rail *via* Pegu Junction (p. 705) to Martaban (169 m. in 11 hrs.), and thence by ferry steamer ($\frac{1}{2}$ hr.).

Thaton (133 m. by rail from Rangoon, 88 m. from Pegu) was formerly a Talaing capital and was destroyed by Anawrata in the 11th century. It was once a seaport, but the sea has long since receded.

From Thaton there is a drive of 16 m. by motor to the Kadaik valley, the loveliest spot in the Thaton District.

Martaban, the railway terminus, is an ancient trading centre. It has given its name to a peculiar type of pottery, also known as Pegu jars: these are of very large size and glazed. They are mentioned by Ibn Batuta as early as 1350, and by many European travellers.

The visitor entering the Salween from the Gulf of Martaban finds the banks covered with the most varied of evergreen foliage, in marked contrast to the low-lying muddy flats that line the mouth of the Irrawaddy.

Moulmein is situated on the river Salween, 28 m. from the sea, within sight of the junction of that river with the Gyaing and the Attaran. The large island of Bilugyun faces it on the W.

Right and left, parallel with the river, are low ranges of hills dotted with pagodas, while to the N. and N.W. beyond the town the precipitous mountain Zwègabin Daung, known locally as the Duke of York's Nose, and the Zingyaik range stand in bold relief against the sky. Moulmein takes the form of an inverted "L," four-fifths of the town, or the portion representing the perpendicular, lying along the left bank of the Salween, flanked on the E. by a low, irregular, pagoda-crowned ridge, and the short horizontal line representing the Daingwunkwin quarter on the

N. stretching along the left bank of the Gyaing River to its junction with the Salween.

As a British settlement Moulmein dates from the year 1827, when it was selected by General Sir Archibald Campbell as the capital of the newly-acquired Tenasserim Province. It is the headquarters of the Tenasserim Division and of the Amherst District, ranks next to Rangoon for its trade in teak and rice, and, with its flourishing rubber plantations to the S., bids fair to be an important centre of the rubber industry. It promises also to be the centre of a salt industry. A grass from which oil is extracted is largely grown in the neighbourhood of the town.

The two pagodas worth visiting are the Kyaikthanlan at the N. end of the ridge and the Uzina in the centre.

The view from the Kyaikthanlan Pagoda is unsurpassed in all Burma, and is thus described in *The Silken East* :—

"From the S.W. angle there is unfolded a picture of a wide river making its last progress in loops and curves to the sea. Enthusiastic people say it is as fine as the harbour of Sydney. At some distance from the river a long, low line of hills runs down on the E., and another, the nucleus of Bilugyun, runs along the W., a rampart for the retreating sun. The river enfolds in its course several large, low-lying islands, and at one point at Mupun it makes a beautiful curve, ending in a headland where rice and timber mills send their smoke into the air, and ships at the harvest season wait for their cargoes to the distant world.

"Looking more directly to the W., there is the river again in a straight bar of gold under the long town of Moulmein. More ships lie here, and they look to me as if they had dropped without explanation from the great world outside into

this landlocked anchorage under the swooning palms. For as I look the conviction is borne in upon me of a drowsy land of extraordinary beauty, but not of a modern city, and the ships that lie here for a season seem to me to form no part of it. Looking a little more towards the N., my eyes are greeted by the Zingyaik Hills, whose loftiest peak, 3000 ft. in height, dominates the whole panorama. Between these hills and Bilugyun the right branch of the Salween makes its way to the sea. In times gone by—in the days of the castle of Murmulan, when Portuguese artillerymen manned the guns of Martaban, and hungry adventurers from the W. swept in their galleons up the gulf—and down even to more recent times, *this* was the main channel of the river."

This magnificent panorama can only be seen in perfection up to the middle of January : thereafter heat-haze partly obscures the view to the N. and E.

The **Kyaikthanlan**, 152 ft. high and 377 ft. in circumference, was founded many centuries ago on the site of a former pagoda destroyed by the Siamese in one of their periodical invasions : hence the name in the Mon language, still spoken in the neighbourhood of Moulmein, *Kyaik Sem Lum*, the pagoda which the Shans destroyed. Visitors should notice the big bell with quaint English inscription—"This bell is made by Koonalenga, the priest, and weighs 600 viss. No body design to destroy this Bell : Moulmein, March 30th, 1855. He who destroyed to this Bell, they must be in the great Heell, and unable to coming out." On the platform of the **Uzina Pagoda** are some remarkably well-carved, life-size figures representing the four objects, the sight of which determined Gautama to become a hermit—a decrepit old man lean-

ing on a staff, a man suffering from a loathsome disease, a putrid corpse, and a recluse in yellow garments, with features expressive of resignation and absence of worldly care.

Moulmein was noted for ivory carving, but the best craftsmen have now removed to Rangoon.

The jail saleroom occasionally has good specimens of wood-carving, and is worth a visit; the showrooms of locally-carved furniture of Mg Ba Kyi and Mg Po Wet should be seen, while the Kaladan bazar deserves a prolonged visit, for all sorts of curios can be obtained by experts in collecting. Chinese and Siamese silks are purchasable at reasonable prices. The Municipal Secretary will furnish visitors with a list of the principal ivory carvers, silversmiths, etc. A visit should also be paid to one of the numerous timber mills to see the elephants working.

The following excursions should not be omitted :—

(1) By steamer (5 hours; Irrawaddy Flotilla Company and Burma Steam Launch Company maintain daily service) to Pagat, thence 2 m. inland on foot or by bullock-cart to the Kawgun caves. A second day is required for the return journey. In one, called the Fish Cave, there is a subterranean lake, and a Burman canoe takes the traveller right through the heart of the hill, a weird passage of some 600 yds., in pitchy darkness.

The **Kawgun Cave** is thus described in *The Silken East*: "Masses of rock running parallel to the cliff's face make the outer wall of the first chamber. Ten thousand images of the Buddha lie within the first sweep of the eye, from yellow-robed figures which line the footpath to terra-cotta plaques fixed high on the jutting face of the cliff; from golden colossi twice the height of Goliath

to miniature figures fit for a pen-wiper. A great stalagmite rising up from the floor to near the brow of the overhanging cliff is completely covered with small images of the Buddha enthroned, and its summit is crowned by a small pagoda." If the visitor returning to Pagat will, before sunset, take his stand on the river bank $\frac{1}{4}$ m. N. of the village, he will see one of the most extraordinary sights in the world: precisely at sundown the bats issue in myriads from a narrow cleft in the cliff overhanging the river and take their flight S. towards the sea. To quote once more from the same book :—

"Yet one more sensation remains to complete the bizarre suggestions of the day. For as I near the gateways of Pagat I am startled by the sound of a great flight of birds, a sound as of grey geese on the wing, but of such volume as can proceed only from a great host. These are the bats of the Pagat caves.

"For more than twenty minutes they sweep out in a long swift line that grows tortuous as it recedes, and as far as I can see into the ruddy twilight the line extends. Swiftly as each creature in it is flying, it looks in the distance like a smoke spiral waiting for a wind to blow it away. They go every evening, say my boatmen, to drink the salt water of the sea; and they cross in their flight the crests of the Zingyaik Hills."

Next morning by an early start in a bullock-cart, another cave, Yathay-byan, 3 m. off, can be visited. It is even more interesting, situated on the side of a precipitous limestone hill. If torches or a lantern be used, it is possible to pass for $\frac{1}{4}$ m. right through to an outlet on the other side of the hill.

(2) From Pagat to Pa-an (8 m.) and on to Shwegun (35 m.) by the same daily service of steamers noted above. The scenery is fully

equal to that on the upper defiles of the Irrawaddy. There are furnished Government bungalows at Pagat, Pa-an, and Shwegun; but the visitor must take his food, bedding, and servants, unless he omits Pagat and Pa-an, and sleeps on board the steamer at Shwegun.

From Pa-an, Naunglon (D.B.) is 11 m. by motor. The road runs through superb scenery past the hill known as the Duke of York's Nose; and thence visit the Elephant Cave.

(3) Moulmein to Kawhnat monastery (8 m.). There is a service of steam-launches several times a day to Kado, and thence it is a shady walk of $\frac{1}{2}$ m. through Kado and Kawhnat villages to the monastery, where are to be seen perhaps the finest specimens of modern *their* architecture in the whole of Burma, as well as a magnificent collection of ivory carvings. A brief descriptive guide-book to these buildings has been prepared, and copies can be borrowed from the Deputy Commissioner of Amherst or the headman of Kado.

(4) Moulmein to the Hpayôn (commonly called The Farm) caves—distance, 9 m.

The best way of making the trip is to take a hackney-carriage or motor-car to the Nyaungbinzeik ferry on the Attaran (4 m.), and thence by bullock-cart. The caves are situated in isolated hills of limestone, which rise picturesquely and abruptly out of the surrounding alluvial plain. They were evidently excavated by the sea. The first consists of an entrance hall running parallel with the face of the rock, a long chamber running into the rock at the S. end, and a subsidiary entrance and hall at the N. end. Along these halls run brick platforms covered with images of Gautama and his worshippers. The second cave, which is best worth visiting, is $\frac{1}{2}$ m. to the S., and access is gained by a steep

path for some 30 yds. to a small opening in the cliff face. To properly explore the enormous cavernous recesses, with their stupendous stalactites and stalagmites, it is necessary to come provided with a supply of blue light illuminant, which can be obtained at any of the numerous chemists in Moulmein. Umbrellas should not be forgotten, as bats swarm.

(5) Moulmein to the Moulmein Rubber Plantation Company's estate at Kwanhla (38 m.)—Notice of a visit should be given by wire to the Manager. The journey can be made in 2 hrs. by motor.

In the Kwanhla and the adjacent Kyonkadat estate (Amherst Plantation Company) trees can be seen in all stages of growth up to 13 years. The soil is declared by Straits experts to be equal to the best in Malaya. The Kwanhla estate enjoys the reputation of being one of the best-managed estates in Burma. Thousands of acres of similar land await development in the neighbourhood.

(6) Moulmein-Kyain Seikgyi—a whole day by steam-launch (daily service by the Irrawaddy Flotilla Co.). The trip can be continued to Amherst, a most attractive seaside resort (the Executive Engr., P.W.D. should be asked for accommodation in the dak bungalow).

At Kyain Seikgyi and Nat-chaung there are furnished Government bungalows, but food, bedding, and servants must be taken.

Moulmein to Tavoy and Mergui.

From Moulmein the visitor may, if he pleases, extend his journey to **Tavoy** (wolfram-mining) and **Mergui** (pearl-fisheries), to which places the steamers of the B.I.S.N. Company ply. Unless, however, he is proceeding to the Straits, he will probably find that his journey will occupy more time

than he can devote to it. **Tavoy**, the headquarters of the District of that name, is a town of 27,042 inhabitants, on the Tavoy River, about 30 m. from its mouth. It is laid out in straight streets, and the houses are for the most part built of timber. To the E. and W., ranges of hills run nearly due N. and S., and the surrounding land is under rice cultivation. Tavoy contains court-houses, a custom-house, a Chinese hotel, and the usual public offices, besides numerous pagodas and monasteries of no special interest. Its trade, except in minerals, is of little importance, and is carried on chiefly with ports in Burma and the Straits Settlements.

Valuable minerals—viz., wolfram and tin—have in late years been discovered (the former in large quantities). Burma's important contributions to the European War consisted of wolfram from Tavoy for munitions, and of oil-fuel from Yenangyaung (p. 720) for the Navy.

The trip from Tavoy to Mergui is interesting, inasmuch as it passes through the **Mergui Archipelago**—a large group of islands which, commencing in the N. with Tavoy island, stretches southwards beyond the limits of British territory in Burma. They have been described as "a cluster of islands and islets with bays and coves, headlands and highlands, capes and promontories, high bluffs and low shores, rocks and sands, fountain streams and cascades, mountain, plain, and precipice, unsurpassed for their wild, fantastic, and picturesque beauty." They are but sparsely inhabited, and are the resort of a peculiar race, the Salons, who rarely leave them to visit the mainland. The principal products are edible birds' nests and *bêches de mer*. The islands are infested by snakes and wild animals. **Mergui** itself, the chief

town of the district of that name, stands on an island in the principal mouth of the Tenasserim River, which falls into the Bay of Bengal about 2 m. N. of the town. It has a population of 17,297, consisting of many races. In the centre of the town is a steep ridge, on which are the great pagoda, the public offices and the residences of the officials. Mergui is mentioned by Cæsar Frederick in 1563. Its modern importance is due to the discovery of valuable pearl-beds in its vicinity. Mining for tin and wolfram is carried on throughout the district, while the rubber plantations are attracting considerable interest and capital. The visitor who can spare the time should inspect the pearl-diving and the mining operations. The town itself contains little of special interest. The harbour is formed by Pataw Island lying between the town and the sea. The D.B. in Mergui town has accommodation for four travellers. There are no hotels.

Fortnightly steamers (B.I.S.N. Co. and Straits Settlt. S.S. Co.) run between Mergui and Victoria Point (which forms the southernmost limit of Burma), and a bi-weekly launch between Palaw and Tenasserim, 44 m. from Mergui, once a famous trade-mart. Travelling by country-boat is practicable throughout the year.

ROUTE 3.

RANGOON to KYAUKPYU and AKYAB.

The visitor who desires to see something of the Arakan Division, or who is proceeding from Rangoon to Calcutta, and has a week to spare, may take the B.I.S.N. Company's steamer (weekly) to **Kyaukpyu** and **Akyab**, calling (except during the monsoon) at Andrew Bay, whence it is 12 to Sandoway.

Kyaukpyu is the headquarters of the District of Kyaukpyu; and has the finest natural harbour on the coast of Burma. It was formerly a British Cantonment. The town is situated in the N. of Ramri Island, and lies close to the seashore, upon a sandy plain, bounded on the S.W. by a low range of sandstone hills, which breaks the severity of the monsoon. Inland is a grassy flat plain. The scenery is very beautiful. In recent years the public health has much improved. The P.W.D. Rest-house and Circuit-house may be occupied by permission of the Dy. Commissioner.

Akyab (pop. 36,569; D.B.) is the headquarters of the Arakan Division and the third seaport of Burma. It is the milling centre for the vast paddy plains of Akyab Dt., exporting annually 150,000 tons of rice. Originally a Magh fishing-village, Akyab dates its prosperity from the close of the First Burmese War (1826). The view at the harbour mouth is one of the most picturesque in Burma. A pleasant excursion may be made to **Myohaung**, the ancient capital of Arakan, 50 m. up the Kaladan and Lemro Rivers. This was the seat of the Mrauk-U dynasty for 350 years up to 1785, and contains architectural remains which experts hold to be unique in Indo-China. For a description of them reference may be made to the report (1891) of Dr Forchhammer on the Antiquities of Arakan. The ruins of the ancient fort, with traces of the massive city wall and the platform on which the old Palace stood and the **Andaw**, **Shitthaung**, and **Dukhanthein** pagodas, with their dark passages, images, and inscriptions, and the Pitakat Taik, or ancient depository of the Buddhist scriptures, are among the most interesting sights of the place.

The antiquarian should also

visit **Mahamuni**, some 22½ m. farther N. There he will find the empty shrine of the Mahamuni image, which was carried away by the Burmese to Amarapura in 1785. The building contains the mysterious Yattara bell with its astrological inscription. Launches of the Arakan Flotilla Co. ply from Arakan to Myohaung and to Mahamuni.

A trip may also be made by river steamer to **Paletwa**, the headquarters of the Arakan hill tracts District, which is inhabited by Chaungthas, Shandus, Kwemis, Chins, Mros, and other strange hill tribes. There is a comfortable Circuit Bungalow capable of accommodating two travellers and containing furniture, crockery, lamps, etc. Meals cannot be obtained.

Wild goat (such as goral and serow) and an occasional gaur and elephant can be shot on a plateau or hill named **Kyaukpandaung** 4500 ft. high, situated about 26 m. from Paletwa. Rhinoceros, the double-horned variety, and elephant are fairly numerous along the Ru and Lemro streams. The hills are steep and are covered with bamboo jungle, sparsely interspersed with trees. Fair Mahsir fishing is also obtainable on the Lemro. Wild pig, jungle fowl, pheasant and partridge abound everywhere.

ROUTE 4.

From **RANGOON** to **BASSEIN** and back.

Bassein can be reached by railway from Rangoon (192 m.) by way of Letpadan junction (p. 722) and Henzada, but the trip can be made with ease and comfort in 30 hrs. in one of the express steamers

of the Irrawaddy Flotilla Company, which leave for Bassein five times a week. The trip is of interest to those who wish to see something of the lower reaches of the Irrawaddy, and of the mode of life of the thriving people of the delta. The route taken is the same as that on the Rangoon-Mandalay service until shortly after Maubin (p. 723) is passed, when the steamer leaves the main stream of the Irrawaddy and enters the Shweloung River. All necessary information about times of starting, places of call, staying on board the steamer, etc., will be readily furnished at the office of the Irrawaddy Flotilla Co. on the Strand Road, Rangoon.

Bassein, the chief town of the Bassein District, and headquarters of the Irrawaddy Division in Lower Burma, is situated about 80 m. from the sea on both banks of the Ngawun River, the extreme Western mouth of the Irrawaddy (pop. 42,563). It is a place of call for ocean-going steamers, being one of the principal ports of Burma. There is a daily railway service to Rangoon *via* Henzada and Letpadan (p. 722); and this may be found convenient for the return journey.

The town is said to derive its name from the word "Pathi," the Burmese term for Muhammadans, as there were so many of them. To this source legend ascribes the building of the Shwemokhtaw Pagoda, in the centre of the town, said to be one of the most ancient and venerable in Lower Burma. A Muhammadan Princess named On-mādan-di had, according to the legend, three lovers (presumably Buddhists), and she told each of them to put up a pagoda. One put up the Shwemokhtaw, the second put up the Tagaung Pagoda, at the Southern edge of Bassein town, and the third put up the Thayaunggyaung Pagoda.

The word "Bassein" is a corrupted form of Kusim, the Cosmin of the Portuguese and other early European writers.

Bassein loomed large in the Second Burmese War of 1852, and for many years there was a British Fort there, which included the site occupied by the Shwemokhtaw Pagoda; but all traces of fortification disappeared long ago. The Roman Catholics have a mission here, and the American Baptist Mission has three branches—for the Burmese, for the Sgau Karens, and for the Pwo Karens. There is also an Anglican Church and a clergyman of the Additional Clergy Society.

The principal local industries are umbrellas and pottery. The former are light sunshades, coloured with pretty designs, and famed throughout Burma. The latter includes flower-pots and ornamental articles. There are several rice-mills on either side of the river, and a large export trade in rice is carried on, chiefly to Europe.

The District is especially noted for its fisheries, the largest being the beautiful Inye Lake, situated in the Kyonpyaw subdivision. It is formed in the shape of a horse-shoe, with a large island in the centre, about $1\frac{1}{2}$ m. long and 1 m. broad. Diamond Island, which is also included in the District, is a charming little islet lying well out at sea opposite the mouth of the Ngawun River, over 70 m. from Bassein. It is in wireless communication with Calcutta and Port Blair, and is the place of call for steamers requiring pilots to come up the Bassein River. It is noted for its large turtles, which lay thousands of eggs on the shore of the island. These eggs are exported in enormous numbers to Rangoon and other parts of the Province. The Irrawaddy Flotilla Company's steamers ply to all important villages in the District.

ROUTE 5.

Up the **CHINDWIN** to **KINDAT**.

The river Chindwin is the greatest tributary of the Irrawaddy. Rising as the Tanai in the Hukawng Valley, N.W. of Myitkina, it flows through the two N.W. districts of Burma known as the Upper and Lower Chindwin, and enters the Irrawaddy about 15 m. N. of Pakokku. Owing to the shallow, tortuous and narrow nature of the navigable channels, stern-wheel steamers of light draught can only be used from October to June, and first-class accommodation is necessarily limited. But the trip is worth making. The scenery is as remarkable in its tropical luxuriance as any in Burma, and interest is enhanced during the open season by the picturesque costumes of the various tribesmen who come down to the river-side villages in large numbers on their way to the plains in search of work and trade.

The steamers of the Irrawaddy Flotilla Company start from Pakokku (p. 716), which can be reached by river from (583 m.) Rangoon or (125 m.) Mandalay; but if the visitor is at Mandalay it will probably be found more convenient to take the train from Sagaing (p. 713) to (79 m.) **Monywa**, which is 76 m. by river from Pakokku. In the rains a steamer from Pakokku leaves Monywa for Mawlaik (269 m.) and **Kindat** (276 m.) on Friday, Mawlaik for Homalin (154 m. farther up), on Tuesday, and Mawlaik for Monywa on Friday in each week. In the dry season it remains at Pantha (288 m. from Pakokku) during Tuesday and part of Wednesday, and then returns to Monywa, the Mawlaik-Homalin run being served by a small steamer, without first-class

accommodation, which leaves Mawlaik every Wednesday and gets back there on the Monday following. All these steamers have a bazar on board. Communication with Homalin and other riverine stations between Mawlaik and Homalin is maintained by two small Government launches, of which one only has accommodation for European passengers.

The principal places are : **Monywa**, headquarters of the Lower Chindwin district, picturesquely situated on the left bank and commanding a wide view of the hills on the opposite bank : **Alone** (84 m.), the next stn. on the branch railway from Sagaing and an important timber depot, the Chindwin Valley forming the natural outlet for the trees felled in the teak forests which are formed into rafts and floated down to Pakokku and thence to Rangoon; **Mingin** (183 m.) on the right bank, a prosperous village, the residence of many timber merchants; **Kalewa** (228 m.), the riverine station for the military police outpost on the Chin Hills; the river Myittha which flows through the Kale Valley, joins the Chindwin here; **Mawlaik** (269 m.), the headquarters of the Upper Chindwin District; **Kindat** (276 m.), the last British settlement; **Pantha** (288 m.), with its cluster of white pagodas.

Beyond Pantha is (42 m.) **Sit-taung**, the starting-point for the mail route into Manipur (p. 500), which goes through Tamu (37½ m.). The road cannot be used by carts, and is crossed by streams which are impassable when in flood. **Paungbyin** (69 m.) has been supplanted as the residence of the local Burmese official by **Homalin** (134 m.).

Difficulties of navigation begin on the Chindwin in January or February, and are not over till May. The river has to be buoyed

afresh each year, and three Government launches are constantly employed on this duty and in the work of removing snags from Homalin downwards between the end of October and the early part of June. The channels vary incessantly, necessitating frequent removal of the buoys, and in the dry season steamers constantly run aground.

There are numerous whirlpools, the best known of which are the Pe We, just below Kalewa, the most dangerous spot on the river; a whirlpool opposite Masein (246 m. from Pakokku), where the R.I.M. steamer *Pagan* was lost in 1897; and another in the neighbourhood of Heinsun, below Kanti — "Anvil Whirlpool," so called from the anvil-shaped rock near mid-stream at its lower end: the current supplies the hammer.

Other Rivers.—The main tributaries of the Chindwin are the Yu and the Myittha from the W. and the Uyu from the E. Navigation on the Uyu is uncertain and difficult, but launches can go some miles beyond the border of the District, 135 m. from its mouth at the height of the rains.

Gangaw, 169 m. up the Myittha, can also be reached when the river is in flood.

Accommodation.—Mawlaik has a Circuit House and an Inspection Bungalow of the Public Works Department. There are Inspection Bungalows also at Homalin, at Sittaung, Pyinbon, Kyaukzedi, and Tamu, on the Sittaung-Tamu Road; at Kalewa, Natkyigon, and Pyintha; and at Mingin. Paungbyin and all township headquarters off the river have a Circuit Room in the court-house.

Pagodas.—The principal pagoda is the Nan-u-shwe-bôntha, near the Post Office, Kindat. It is said to have been erected by Alaungpaya (1753-60) after the conquest of Manipur.

On the other side of the river,

picturesquely situated among the hills, is the Paungdaw-u Pagoda, said to be the work of his son Sinbyuyin (1763-75), who also marched against Manipur.

Roads.—The only roads maintained by the Public Works Department for use throughout the year are from Sittaung to Tamu (37½ m.); from Kalewa to Kalemmyo (27½ m.), and from Pyintha, the port of Kalemmyo on the Myittha, through Kalemmyo towards Fort White in the Chin Halls (9½ m. within the District). None of these roads can be used by carts.

The Public Works Department also maintain fair-weather roads from Homalin to Maingkaing (30½ m.), with a branch to Thetkedaung (4 m.); Kaungngo (on the above road 4 m. from Maingkaing) to Paungbyin (62½ m.); Paungbyin to Kindat (65 m.); Pyintha towards Falam (19½ m. within the District), with a branch from Natchaung to Myittha at Indin. The nominal road from Homalin to Tamanthi (62 m.) is not maintained; but that from Leikshaw, on the Paungbyin-Kaungngo Road, to Naungpuaung, near the Maingkaing-Homalin Road (20 m.), has been constructed for cart traffic.

Physical Description.—The Upper Chindwin¹ is the Northernmost district of the N.W. Frontier Division in Upper Burma. The Somra tract, a mountainous region S. of the Nantaleik Valley, populated by a Naga tribe, named by the Manipuris "Tangkhuks" and by the Burmese "Uzumbok" or "Crested Chins," is now administered, and is under the Dep. Commr. of the Upper Chindwin Dt.

The unadministered tracts within the boundaries of the Province and the sphere of influence (more or less) of the Deputy

¹ For an account of the Upper Chindwin see pp. 130-136 of *Burma as I Saw it* R. Grant Brown (Schoen, 1926).

Commissioner may be enumerated as follows :—

(1) The Taro Valley, to the N. of the falls. This lies along the Chindwin, and is separated at its N. end from the better-known and larger Hukawng Valley (really a vast plain) by a range of hills through which the river flows in narrow defiles. The valley is held by petty Kachin Chiefs with numerous Naga subjects. An interesting incident of Sir Harcourt Butler's term of office as Governor was the tour made by him in 1925 in this region, which resulted in the abolition of slavery in the Hukawng Valley.

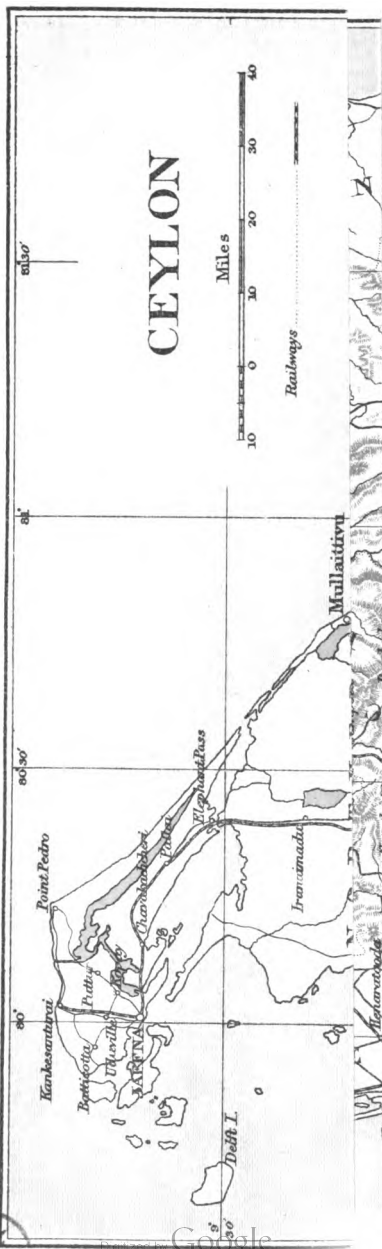
(2) The tract between the upper part of the Kanti State and the administrative boundary of the Naga Hills (a District of Assam which lies some 70 odd m. W. of Kanti itself). This is inhabited by wild Naga tribes, of which very little is known, and it has never been explored—at least from the side of Burma.

(3) S. of the above the Saramati range and the country round its base, including the valley of the Nantaleik. This also is occupied by head-hunting Nagas. The Nantaleik Valley was partly explored by Mr Porter, Deputy Commissioner in 1893; and in 1911 Mr Street, Assistant Commissioner, led a column along the same route, rounding the base of Saramati, and returning to the Chindwin, where it crosses latitude 26°.

(4) The tributaries of the Chindwin to the E. and S. of Kanti, towards the Kachin country to the N. of Myitkyina District, contain a few small and scattered Kachin and Naga villages, which regard the Kanti Sawbwa more or less as their over-lord, though they pay no tribute to him.

Minerals.—Coal exists in large quantities, but this has been found so far in localities where it would not at present pay to work it. A portion of the carboniferous

tract between the Yu and Myittha Rivers was explored by Dr Noetling, who declared the coal to be of good quality, comparing favourably with the best Indian kinds. Dr Noetling has estimated that in this area alone, to which all the coal in the District is by no means confined, more than 100 million tons of workable coal could be obtained above the level of the Chindwin. Mineral oil occurs in several places, most plentifully within the coal-bearing tracts. Gold-dust is found in the Chindwin and other streams which flow into it from the E., but appears to be most plentiful in the Uyu River and its tributaries—in fact, some of the inland villages in the Maingkaing township have had a gold currency from time immemorial. Rubies and sapphires have also been discovered on or near the Uyu. None of the above minerals, however, have as yet been systematically worked. Jade is found in the Nantaleik River near Tamanthi, and on the Namsam, which forms the boundary between the Upper Chindwin and Myitkyina Districts in the extreme N.E. No stone, however, has been quarried in the mines on the Nantaleik since the annexation. Pottery clay is fairly common, but little use is made of it. Salt springs are found at Yebawmi on the Uyu, and boiling is carried on there to a small extent. Strong indications that petroleum is located in the area to the E. of Kindat, some 25 m. distant from that centre, have led to the exploiting of this area by the Indo-Burma Petroleum Company, who have sunk many wells and are actively engaged in prosecuting their search for the mineral oil. Indications also of the presence of petroleum in the hill tracts on the E. of Kyabin township in the Mingin subdivision have led to the area being licensed to another Company.



CEYLON

THE scenery of Ceylon¹ is magnificent, and its climate attracts an increasing number of visitors. It is very easy to reach Ceylon by steamer from an European port to Colombo; and there is direct railway communication with Madras and S. India by the mail route *via* Talaimannar (p. 760). Visitors, not only from the East generally, but also from England, spend months in Nuwara Eliya, where there is an 18-hole golf-course, said to be the best in the East.

The most suitable time for a visit to Ceylon is between the months of November and March; but Nuwara Eliya is enjoyable also from August to January.

The area of the Island is 25,332 sq. m., and the total population (including coolies, but excluding the military and shipping), as enumerated at the last census of 18th March 1921, was 4,498,605, and consisted of 8118 Europeans, 29,439 Burghers, 3,016,154 Sinhalese, 1,120,059 Tamils (including coolies), 284,964 Moors, 13,402 Malays, 4510 Veddas, and 21,959 others.

The value of the exports during 1927 was Rs.406,603,779; that of the imports, Rs.447,735,640. The public debt on 30th September 1927 amounted to—sterling debt, £12,657,393; rupee debt, Rs.3,000,000: it has been incurred for the construction of harbour-works, railways, irrigation projects, water-works, drainage and other public works. The old kings constructed irrigation works by which a great part of Ceylon was made cultivable. These ancient works, long fallen into decay and partially restored at enormous cost, are features that excite the interest of the traveller almost as much as the ruins of great cities. The revenue collected during the year ending 30th September 1927 was Rs.129,358,917; the expenditure amounted to Rs.123,621,897. 4244 vessels, with a tonnage of 12,719,600 tons, entered the ports of the island in 1927. The principal exports are tea, coconut products and rubber.

¹ SELECTION OF BOOKS ON CEYLON.

- Times of Ceylon Green Book*; a Directory of Ceylon. (Annual.)
 Ferguson's *Ceylon Directory*. (Annual.)
 L. J. B. Turner, *Handbook of Commercial and General Information for Ceylon*. (Colombo, 1927.)
 H. W. Cave, *Golden Tips: Ceylon and its Tea Industry*. (Sampson Low, 1901.)
 R. Farrer, *In Old Ceylon*. (Arnold, 1908.)
 Ashley Gibson, *Cinnamon and Frangipani: Ceylon, the Isle of Sweet Savours*. (Chapman & Dodd, 1923.)
 R. Knox, *An Historical Relation of the Island of Ceylon*. (Original 1681, reprint, Maclehose, Glasgow, 1911.)
 G. E. Mitton, *The Lost Cities of Ceylon*. (Murray, 2nd edn., 1928.)
 H. Parker, *Ancient Ceylon*. (Luzac, 1910.)
 G. Platô, Ltd., *Ceylon: Its History, People, Commerce, Industries and Resources*. (Colombo, 1924.)
 H. Storey, *Hunting and Shooting in Ceylon*. (Longmans, 1907.) Out of print.
 Sir J. Emerson Tennent, *History and Topography of Ceylon*. (A standard work, but not easily procurable; Longmans, 1860.)

The **Currency** of the Island is on a decimal basis, and the rupee is divided, not into annas as in India, but into cents. The coins consist of copper (1 cent and $\frac{1}{2}$ cent pieces), nickel (5 cent piece), silver (rupee, 50 cent, 25 cent, and 10 cent pieces). Ceylon Government currency notes of Rs.1000, Rs.500, Rs.100, Rs.50, Rs.10, Rs.5, Rs.2 and R.1 are also in circulation.

History.—The Mahawansa is the chief national Chronicle, written in Pali in the 5th century A.D. by Mahanama, a priest of the royal line. This has been translated by Turnour (of the Ceylon Civil Service, 1837), Wijesinha, and Geiger. (Pali Text Society, Colombo, 1912.) The Dipavamsa, an older Chronicle, is the history of the Island. The Suluwansa is the Chronicle of a race of inferior power.

Wijaya (543 or 483 B.C.), is said to have come over from India on a raiding expedition and established himself in Ceylon. Though the Mahawansa describes a visit of Gautama Buddha to Ceylon, there is no historical evidence for it. During the reign of Dewanampiya Tissa (307–267 B.C.), Mahinda, son of Asoka, King (272–231 B.C.) of Magadha in India, was sent over to introduce Buddhism into Ceylon. The Tamils (=damilos in the Mahawansa), i.e., the Cholyans and Pandians of S. India, constantly raided the island. Elala was a Cholyan king (205–161 B.C.); his tomb is at Anuradhapura. Another Tamil invasion was in 104 B.C.; another in the middle of the 9th century. Sena II. crossed to India to help a Pandyan prince. The Indians looted Anuradhapura and carried Mahinda V. (1001 A.D.) captive. Wijaya Bahu I. (1065 A.D.) recovered Polonnaruwa from the Tamils. This was the seat of Parakrama Bahu I., the great king (1164 or 1153 A.D.) for 33 years. The Portuguese and other Europeans appeared on the scene from

the 16th century, and from 1592 the native kings ruled from Kandy. "Ceylon has been continuously, but not entirely, ruled by European races since 1507, when the Portuguese settled on the W. and S. coasts. The Dutch dispossessed the Portuguese in 1656, but gave way in turn to the British, who have held the Maritime Provinces since 1796, and the whole Island, including the interior and Kandyan Kingdom, which neither the Portuguese nor the Dutch ever occupied, since 1815."—(*The Ceylon Manual*, by H. White.)

Capitals.—The capital of Ceylon has changed from time to time, and various dates have been assigned to the moves. Earlier than Anuradhapura, the capital was Magama (Tissamaharama), in the extreme S.E. of the island. Anuradhapura, founded about 500 or 437 B.C., became the settled capital from about 267 B.C. to 729 A.D.; according to other statements, from 500 B.C. to the middle of the 9th century. Within the above period Sigiriya was the capital for 18 years from 477 A.D. During the reign of Kasyapa I. Polonnaruwa, as a capital, has been dated from 781 to 1288 A.D.; also, variously to 1013 A.D., and, with breaks, up to 1314 A.D. Yapahuwa was the capital, for less than 20 years in the 13th century, c. 1277. The capital was at Kandy, from 1592 to 1815. Gampola was also the capital for a short time before Kandy.

Buddhism in Ceylon.—The census has shown the Buddhists to be more numerous in Ceylon than the followers of all other religions. The whole subject of Buddhism in Ceylon (belonging to what is called the Southern School) has been exhaustively treated in Bishop Copleston's work *Buddhism, Primitive and Present, in Magadha and Ceylon* (Longmans, second edition 1908), from which a few

facts have, with permission, been taken.

When Mahinda, said to be a son of Asoka, King of Magadha, c. 274–237 B.C., the most powerful patron of Buddhism, introduced that religion into Ceylon about 250 B.C., he met the reigning king Tissa at the place now known as Mihintale (Mahindatale). He brought with him (in memory, for none of the books were yet written) the collection of Buddhist "Canonical Books," known by the name of the Three Pitakas, and the Commentaries upon them all in Pali. He translated them into Sinhalese (a language which was closely allied to Pali), and they are believed to have been preserved in Ceylon by oral tradition, till they were committed to writing about 80 B.C. From Mahinda's time onwards, Buddhism may be said to have been the national religion, and was officially patronised; shrines were built, viharas constructed as dwellings for the monks, and many inscriptions are still to be seen in which such donations are recorded. A very fine specimen of such an inscription, on the living rock, in "Asoka" characters, is to be seen close to the high road from Kurunegala to Puttalam, about 18 m. from the latter. It is in one line, over 100 ft. long. The frequent invasions, however, of Tamils from Southern India, and the usurpation of the throne by Tamil dynasties, repeatedly led to the expulsion of the monks and the destruction of their buildings. About 400 A.D. Buddhaghosha, the chief commentator, is said to have come from Magadha to inquire into these Commentaries. He translated into Pali what he found and composed more. His works have left their impress on the Ceylon school of Buddhism, and have been considered as absolute authorities on the interpretation of the sacred text. During the succeeding centuries the religion underwent

many vicissitudes; but the victories of King Parakrama Bahu I., 1164–1197 or 1153–1186, "established him in undisputed power, which he used for the reformation and promotion of Buddhism and for the erection of innumerable buildings for its service." This period of prosperity was followed again by troublous times, and Buddhism had little vitality when the British occupied Ceylon in 1796: it became "more and more the religion of the less civilised and less prosperous." In the period 1875–1900 there was a remarkable revival, due mainly to external influence, and this movement has still considerable force.

Names of Places.—The names of places in Ceylon have a formidable appearance, and a bewildering sound, for visitors; but a slight acquaintance with the language removes much of their terrors. Many of them end in *-pura*, or in the Tamil districts *-puram*, which means "town" (Sanskrit, *pura*), or in *-nuwara*, "city" (Sanskrit, *nagara*); many in *-gama* (Sanskrit, *grāma*) "village,"; others in *-gala* (Sanskrit, *giri*), "rock" or "hill"; *-kanda* is a "mountain"; *ganga*, a river; *-oya*, a large stream. Others, again, are formed with *-tara* (Sanskrit, *tāra*) or its equivalent, *-tota*, meaning a ford, or if on the coast, a port; thus *Kalutara* or *Kalutota* = Black Port or Ford. To these *-turai* corresponds in Tamil Districts. Others are named after the artificial lakes, or "tanks," which are such an interesting feature of Ceylon scenery, and which are called in Sinhalese *tale* (Pali, *talāka*), or *wewa* (Sanskrit, *vāpi*), and in Tamil *kulam*; while smaller ponds give the termination *-vila* (Tamil, *-vilei*). Other common endings are *-deniya*, "a strip of rice-field running into hilly ground," *-pitiya*, "ground," *-watta*, "garden." Among prefixes are *maha*, great; *duwa*, an island; *ela*, a stream

gaha, trees. The earlier part of the name is very frequently the name of a tree; just as in England we have Ashdown and Beech Hill. The word *ārāma*, a "pleasure-garden" or "park," explains Tissamaharama, "King Tissa's Great Park," and Thuparama, the park of the oldest "stupa" or "dagoba" in the Island. The visitor may thus recognise in Nuwara Eliya the "plain" in the territory of "the city" (Kandy); in Anurādhapura the "city" of the constellation Anuradha; Hambantota is the "port" of the Malay boats, called "hambans" or "sampans." Even Kahatagasdigiwewa becomes intelligible as the "lake" of the kahata-tree branch, and Urugasmanhandiya as the "junction of roads by the uru-tree."

Administration.—Ceylon is a colony acquired partly by conquest and partly by cession. It is administered directly from the Crown by the Secretary of State for the Colonies. The Government is vested in a Governor, assisted by an Executive Council of 8 members, and a Legislative Council in which (as reconstituted in 1924) there are 12 official members, and 37 unofficial (34 elected). Important constitutional changes are under consideration. The head of the Civil Service is the Colonial Secretary. The island is divided for administrative purposes into 9 Provinces, comprising 19 Revenue Districts. Each Province is under a Government Agent. The present Governor, Sir Herbert Stanley, K.C.M.G., assumed office in 1927 (residences at Colombo, Kandy and Nuwara Eliya).

Travelling in Ceylon is, for the most part, comparatively easy. The **Railway** has always been a Government system, and is one of the principal sources of revenue in the Island. The first section

was opened in 1865; in 1927 895 m. were open, including the branches. The lines are constructed on a broad-gauge (5 ft. 6 in.) with exception of the Kelani Valley Railway and the Nuwara Eliya section (2 ft. 6 in. gauge). On the main lines good sleeping accommodation is provided (Rs. 5, above 1st class fare).¹ Refreshment cars are attached to the express trains from Colombo to Talaimannar and to Kandy. The **Roads** are in most places excellent, and almost every town of importance is situated on a road fit for motor traffic. The **Rest-houses** are far more comfortable places of abode than the corresponding institutions in India. In the larger towns, such as Badulla, Ratnapura, Matara, and at some of the stations on the great north road, they are, in all but name, hotels; but the traveller is not allowed to remain in them more than three days without permission, which, however, is easily procured. On all the principal roads they are provided with bed-and table-linen, baths, tea and dinner services, etc. **Motor-omnibuses** carrying passengers run on nearly every main road in the island. There is seating accommodation for 8 to 16 persons; light luggage may be taken, free of charge. A list of services will be found in Ferguson's *Ceylon Directory* (pp. 467-475). **Motor-cars** are generally available and can be hired from 50 cents to R.1 per mile: motor-bus fare, 5 to 10 cents per mile per seat. Motorists are warned to be careful of the sharp elbows and 8 turns on the roads. The gradients in some places are severe. Good **maps** may be procured at the Surveyor-General's office, including a motor map (price Rs. 5.50). Motor maps are issued also by Messrs H. W. Cave & Co. (price

¹ Sleeping berths should be booked well in advance. See the *Time and Fare Tables* of the Ceylon Government Railway.

Rs.2.50), and the Automobile Club of Ceylon. A Ceylon Road Book is published by the *Times of Ceylon*. A coasting steamer makes a circuit of the island twice monthly, once North and once South.

Racing has made great strides in Ceylon of recent years. There are race-courses at Colombo (where there is an electric totalisator), Galle, Kandy, and Nuwara Eliya. Race-meetings are held at Colombo at short intervals during the year; and there is a meeting at Nuwara Eliya in February, and also a **Lawn-tennis** Championship Tournament.

COLOMBO.

COLOMBO (lat. $6^{\circ} 55' N.$, long. $79^{\circ} 50' E.$, pop. 248,826 in 1921). Whether the visitor crosses over to Ceylon from India by the mail route from Madras *via* Talaimannar (see p. 762), or whether he makes his entry by sea, Colombo, the "Charing Cross of the East," will be his first port of call.

The Passenger Landing Jetty and Custom House lie at the S. end of the harbour, and receive the protection of four magnificent breakwaters, of which the S.W. Breakwater was first constructed. The first stone was laid by King Edward VII., then Prince of Wales, in 1875, and it was completed in 1885, at a cost of £705,207. It is 4212 ft. long, and is formed of concrete blocks of from 18 tons to 33 tons each, and capped by a solid concrete mass, the top of which stands 12 ft. above low-water level. It terminates in a circular head, 62 ft. in diameter, on which stands the Pilot Station and a small lighthouse showing a red light. The N.E. Breakwater, which is a rubble embankment 1100 ft. long, tipped from a staging, was commenced in 1896 and completed in 1902 at a cost of £93,665. The N.W. Break-

water is an island work 2670 ft. in length, and running between the S.W. and N.E. Breakwaters, leaves a S. entrance of 800 ft. and a N. entrance of 700 ft. This breakwater is of similar construction to the S.W. Breakwater, and carries two small lighthouses, one at each head, N. and S. It was commenced in 1898 and completed in 1907 at a cost of £437,992. An arm running at an angle to the S.W. Breakwater was commenced in 1907 and completed in 1912 at a cost of £338,930. This breakwater is also similar in construction to the S.W. Breakwater, and is 1800 ft. long, terminated by a circular head, on which stands a small lighthouse. The area protected by these breakwaters is 643 acres, or 1 sq. m., three-fourths of which have water more than 27 ft. deep, and afford shelter, during the S.W. monsoon, for forty-five ocean-going steamers, drawing from 27 ft. to 33 ft. of water, and thirty-nine during the N.E. monsoon, drawing from 27 ft. to 33 ft. of water.

A Graving-dock, capable of taking vessels up to 700 ft. long, 75 ft. broad and 30 ft. draught, and a Patent Slip for smaller vessels have been constructed.

A Coaling Depot, 18 acres in extent, with eighteen jetties, each 200 ft. long, and a barge-repairing basin, have also been constructed. There are two jetties for bunkering oil-fuel, and one jetty for the discharge of oil tankers.

The shore accommodation for ships' cargo has been much improved and added to by the construction of several large warehouses, built on a reclamation on the S.E. margin of the harbour.

A canal connects the harbour with the lake.

Motor launches (50 cents each person, night fares, 50 per cent. extra), convey passengers from steamers in the inner harbour to the Jetty. For rowing-boats the tariff is 35 cents and 55 cents, from

6 A.M. to 7 P.M., and 7 P.M. to 6 A.M. respectively; between the Jetty and the outer harbour the rates are 55 cents, 75 cents from 6 A.M. to 7 P.M., and 75 cents from 7 P.M. to 6 A.M. respectively.

The Grand Oriental Hotel stands near to and overlooking the Passenger Jetty, and close by are the Bristol Hotel, "Queen's House," (the Governor's residence), the Barracks (consisting of several blocks built *en echelon*), and some remains of the old Dutch Fort.

A little more than a mile away is the Galle Face Hotel. Rickshaws are always in waiting. The visitor will pass by the Government Offices, looking out on the Gordon Gardens and, proceeding between Queen's House on his right, and the General Post Office on the left, he will, after passing the Clock Tower, the Barracks, and the new Council Chamber and Secretariat, find himself on the fine open space called the Galle Face, intersected by the direct road to Galle. A good view of the city may be had from the top of the **Clock Tower**; the flashing light is visible 18 m. at sea; the attendant expects a small fee.

Towards the south of the Galle Face Esplanade is the Colombo Club, a fine oval building overlooking the sea. About the middle of the Promenade, near the sea, is a stone like a milestone, with an inscription in which Sir Henry Ward, who made it, recommends the walk to the care of his successors for the use of ladies and children. Near the Colombo Club stands the Victory column, 120 ft. high, designed by Sir E. Lutyens and completed in 1923 to commemorate Ceylon's part in the Great War.

The City of Colombo extends from the Kelani River on the N. to the fourth mile on the Galle Road on the S., and has a breadth of $3\frac{1}{2}$ m. from the sea to the E. outskirts, covering an area of 8617 acres.

Drives.—Colombo and its neighbourhood afford scope for a multitude of charming and picturesque drives. The roads are excellent for motoring. The first given below is recommended to those who have not yet seen anything of the East, and will afford a pleasing introduction to the distinguishing characteristics of Oriental life and scenery; but, excepting the latter part of it, which is pretty, there is little in this drive to interest one already familiar with India.

(1) Commence at the Galle Face Hotel, and take the road along the sea past the Barracks, until the statue of Sir E. Barnes is reached. He was Governor between 1824 and 1831. Then turn to the right down Princes Street into the Pettah, formerly the residential quarter of the Dutch burghers and now a typical Eastern bazar; and continue past an old Dutch belfry, beyond which are the old *Town Hall* (replaced by a fine new building overlooking Victoria Park and *Public Market-place*). Here two streets diverge—the one to the left, Sea Street, where dwell the dealers in rice and cotton, and where are two *Hindu Temples*, quaint and picturesque, but of no great size or importance; the other, Wolfendahl Street, to the right, conducts to *Wolfendahl Church*, a massive cruciform building on high ground, built by the Dutch in 1749, on the site of an old Portuguese church called *Aqua de Lupo*, and commanding a fine view of the city and harbour. Here are monuments and hatchments recording the decease of Dutch officials. It is the most interesting as well as the most complete of the few remaining relics of the Dutch occupation. Thence the drive may be continued in a N.E. direction to the R.C. *Cathedral of Santa Lucia*, the finest ecclesiastical edifice in the Island. Adjoining it is a college

COLOMBO

Scale of 1 Mile



for Roman Catholic boys and a convent with school and orphanage attached. Then N. and a little W. the Anglican *Cathedral of Christ Church* (known as the "Stone Church") is reached. It stands in a park, given by Dr Chapman, the first Bishop. About 1 m. to the N. is *St James's Roman Catholic Church*. The drive through the suburb of *Mutwal* is extremely picturesque. It is chiefly inhabited by fishermen, who are mostly Roman Catholics, as the numerous large and imposing R.C. churches testify. In *Mutwal* are the new *Graving-dock*, and the *Elie House Reservoir* in connection with the town water-supply. On reaching the *Kelani River* at the end of the long street of *Mutwal*, turn to the right, and, crossing a tongue of land till the river is again reached, follow its bank to the *Victoria Bridge*, which carries the great road to Kandy, and supersedes a most picturesque *Bridge of Boats*, long one of the most attractive spots in Colombo to an artist. This part of the drive shows to perfection the way in which the tiny houses and small churches are so nestled under the shelter of the trees as to be altogether invisible from above. Turning to the right at the bridge, follow the road to *Grandpass*, and turn to the right till the *Prince of Wales Avenue* is reached. Turn to the left and follow this fine avenue till *Maradana Ry. Stn.* is reached. Thence proceed to the left along *Maradana Road* and *Norris Road* to the *Galle Face*. The R.C. *Church of St Philip Neri* is in *Norris Road*, opposite the *Port Railway Station*.

(2) The second drive commences by crossing the bridge from *Galle Face*, almost immediately behind the hotel, to *Slave Island*, and then driving along the edge of a beautiful fresh-water lake past the pretty residence of the General commanding the troops

in Ceylon to the *Victoria Park*. The *Park* occupies the site of the old *Cinnamon Gardens*, contains a riding track, and is well laid out with ornamental grounds, in the midst of which a *Museum* (closed Friday and Sunday morning) was built in 1877. It is exclusively devoted to the exhibition of Ceylon products, antiquities, and natural history, and is on that account of the very greatest interest to the visitor. The famous tortoise, said to have been over two hundred years old at his death, is preserved here. On the ground floor are some interesting stone fragments, and particularly a colossal lion, brought from *Polonnaruwa*, on which the King sat to administer justice, one of the unique windows from the ruins of *Yapahuwa* (p. 761), the cast of a colossal portrait statue of *King Parakrama Bahu, A.D. 1153*, and some fine bronze statues from *Polonnaruwa*. The copies of the frescoes at *Sigiriya* (p. 763) on the walls of the staircase should be noticed; also a Portuguese cannon dredged from the harbour. There is a valuable library of zoological and archaeological literature. In front of the *Museum* is a statue of *Sir William Gregory*, Governor from 1872 to 1877. The *Garden Club* is in *Victoria Park* and *Princes Club* in *Reid Avenue*, *Cinnamon Gardens East*.

(3) A drive may be taken from *York St.*, near the *Passenger Jetty* to *Borella* and back. The interest of this drive is the bright picture it gives of the life of the people, the town, and its characteristic features, including a public market.

(4) Another drive would follow the *Union Place* (avenue of *Peltophorum* trees), past the *Eye Hospital* in *Ward Place*; thence to the right to the *New Town Hall* overlooking *Victoria Park*: then by *Torrington Place* to the *Race-course*, adjoining the *Royal College*. The visitor should return

by Buller's Road, MacCarthy Road, Ward Place and Turret Road back to Kollupitiya (Colpetty) and the Galle Face. This drive would cover the residential area called the Cinnamon Gardens.

Excursions.—One of the pleasantest in the neighbourhood of Colombo is that to a Buddhist temple at the village of **Kelani**, 2 m. up the river of the same name. Pass through the hot and dusty Pettah, or Native Town, for about 4 m., as far as the river, which is crossed by the massive iron **Victoria Bridge** (see p. 739). After crossing the bridge the road passes through coconut groves and among the houses of the dense population for another 2 m., when the temple itself is reached. The *Mahawansa* refers to it as contemporary with Buddha. The original dagoba was built at a very early period, but the one that is now standing was constructed between the years 1240-67 A.D., and rebuilt about 1301 A.D. It stands on the river-bank, and is handsomely, though gaudily, decorated. According to the *Colombo Guide*, it stands on the site of a shrine erected by Prince Yatalatissa, 306 B.C. A great festival takes place here at the full moon of May, and lasts four days.

None of the exclusiveness which distinguishes Hindu and Muhammadan shrines is to be found in the Buddhist temples, to every part of which a stranger is freely welcomed by the yellow-robed monks. This, however, does not apply to the dewalas, which are, strictly speaking, Hindu shrines.

A favourite excursion by train is to **Mount Lavinia**, 7 m. from Colombo. The Grand Hotel, which was built by Sir E. Barnes, when Governor, as his Marine Villa, stands on a rocky eminence close to the station. It is a favourite resort, with a special fish cuisine and facilities for sea-bathing. A

fine view of Colombo can be had from the terrace of the hotel. The Colombo Fort station is the most convenient starting-place for the journey by train which passes by the sea; but taxis and rickshaws are always available at the Jetty and the Hotels. (Motor car to hold four, there and back, two hours, Rs.20; apply to Messrs Thos. Cook & Son, Lloyd's Building, Princes Street.)

Motor-omnibuses run from Colombo to **Kaduwell** (p. 752) and from Borella (p. 739) to **Kotta**, the latter linking up with the Colombo-Borella tram service. At Kotta, which was once a capital (see p. 744), there is a C.M.S. College, prettily situated.

Excursions round the island may be made by the boats of the Ceylon S.S. Co., which sail alternate Wednesdays, and make the circuit in about ten days.

The Colombo Municipality issues a leaflet of information for visitors.

ROUTE 1.

COLOMBO TO KANDY.

By rail 75 m. Opened 1867.

The line on leaving Colombo crosses the River Kelani by a very fine girder bridge. To those who have never before visited the tropics this journey will be full of interest. They will see for the first time vast stretches of paddy land of the most vivid green, the unfamiliar but soon recognised forms of the cashew, the bread-fruit, the jack, the frangipani, and the various forms of palm—coconut, areca, kitul, and above all the talipot, a specimen of the gigantic white flower of which is generally visible at some point on the journey.

From $\frac{1}{2}$ m. **Maradana Junction** a branch line runs to **Avisawella**

and Yatiyantota. A rail motor service from Homagama to Ratnapura passes through Yatiyantota (p. 752).

At 6 m. **Kelaniya** stn. Two m. from here is one of the oldest Buddhist shrines in the island.

At 9 m. **Ragama** stn. The buildings of the former Boer prisoners' camp are now used as a Hospital and an Emergency Quarantine Camp. There is a branch line from here to Negombo, Chilaw, and Puttalam (see Route 6, p. 759).

Near **Mahara** (10½ m.) there is a convict establishment. The convicts quarry the stone for Colombo, the breakwater and other Government purposes. **Mahara** R.H., 8½ m. by road from Colombo, is a delightful resort for travellers.

Gampaha Stn. (16½ m.). Here is one of the most beautiful model garden towns in Ceylon. ½ m. from the station is a Government Botanic and Experiment Garden, opened in 1876 for the cultivation of the first Para rubber plants introduced into Ceylon. Seeds of the *Hevea Brasiliensis* were brought from the Upper Amazon and germinated at Kew. The original trees, as well as the second and third generation, may be seen here. Here may be seen Gambier (*Uncaria gambier*), also a caoutchouc-yielding shrub of Malaya, which thrives and produces seed here, though not at Peradeniya; also species of rubber producing lianas (*Landolphia*); the valuable drug ipecacuanha, which thrives in the moist tropical heat here to an extent not known at higher elevations. A female specimen of the "Double Coconut" (Coco-de-mer), planted in 1884, flowered and set fruit here in 1915 for the first time in Ceylon. A portion of the original jungle of the low country of Ceylon, which

has been preserved in the Garden, is a source of interest, especially to botanists.

3 m. from the next ry. stn., **Veyangoda**, is the Rock Temple of Warana, to the E. of the Kandy Road.

34 m. **Ambepussa** station (R.H.). The line here enters the lower hills. The soil is very suitable for cocoanuts, but malaria prevails.

45 m. **Polgahawela** Junction station, R. (R.H. commodious; petrol depot), 241 ft. above sea-level. 2 m. from here are a large Buddhist monastery and temple, at Denagomuwa. Polgahawela is the junction for **Kurunegala**, **Anuradhapura**, **Medawachchiya**, **Jaffna**, and **Kankasanturai** (257 m. from Colombo) in the extreme N. of the island (Route 7), with a branch from Medawachchiya (p. 761), to **Talaimannar** (steamer for Dhanushkodi on S. Indian Ry.).

8 m. S. of Polgahawela is **Kegalla** (R.H. *), a small town in a most lovely situation, and encompassed by the most delightful scenery. Hdqrs. of the Asst. Govt. Agent of the Kegalla Dt. of the Sabaragamuwa Province.

52 m. **Rambukkana** station (R.H.). Here the ascent of the "Incline" commences at an elevation of 313 ft., and continues 12 m. with a gradient of 1 in 45 to an elevation of 1698 ft. The vegetation is here of great richness and beauty.

65 m. **Kadugannawa** station is at the top of the pass. The beautiful scenery and increasing coolness of the air make the journey most enjoyable. Two new tunnels (one of them a very long one) have been constructed to secure immunity from rock falls, which, during the monsoons, have hitherto interrupted through-communication to

prolonged periods. Near the top of the incline the road made by Sir Edward Barnes is seen on the right, winding up the hill. The two roads reach the summit of the pass at the same spot, and there a column (a copy in brick of the Duke of York's Column in London) has been erected to the memory of Captain Dawson, the engineer of the first road. Just over the station is the Hill of Belungala (the Watcher's Rock), 2543 ft. above sea-level, from which, in the troubled days of old, a watch was kept to report an enemy advancing from the plains.

A rail motor service from Kadugannawa to Kandy and Matale (p. 762) was introduced in December 1927.

71 m. **Peradeniya Junction** station. This place is 136 ft. lower than the top of the pass. The main line continues S., whilst the branch line to Kandy and Matale strikes N. Half a mile from the junction is New Peradeniya station (R.H., $\frac{1}{2}$ m.) where, if the visitor is pressed for time, he should arrange to have a carriage waiting for him, drive round the Botanic Gardens, and proceed to Kandy.

New Peradeniya Station. The Royal Botanic Gardens at Peradeniya, are unrivalled. They are $\frac{1}{2}$ m. from New Peradeniya Station and $3\frac{1}{2}$ m. from Kandy. Their chief features are the enormous clumps of giant bamboo, the extensive and well-kept lawns surrounded by magnificent specimens of trees, the avenues of palms (Talipot, Palmyra, Royal palm and Cabbage palm) and the specimens of *Ficus elastica*, with its enormous buttressed roots meandering over the surface. Approaching the Gardens, on the right is a row of the beautiful tree *Amherstia nobilis*, the most beautiful of flowering trees. Opposite, on the left ap-

proach, there was for upwards of seventy years a striking landmark in a row of Rambong rubber trees (*Ficus elastica*), which, dying from old age, were replaced by a row of young plants of the same species in 1914. The entrance-gate pillars are draped by the beautiful yellow-flowered creeper *Bignonia unguis-cati* and on either side is a specimen of the stately African oil palm. On entering, the visitor is confronted with a large oval group of palms, containing numerous and interesting species. To the right is the Spice Collection, including very fine nutmeg trees over seventy years old, also cloves, cinnamon, allspice, vanilla, cardamom, ginger, etc. Along the centre of the Gardens is the straight Main Central Drive, bordered on either side by a sloping bank of mixed tropical foliage and flowering shrubs, etc., and shaded by tall trees in the background. Branching off to the left at right angles is the Monument drive, leading to the Gardner Monument, and passing through a young avenue of the interesting "Double Coconut" palm (*Coco-de-mer*). Opposite to this, on the right, is the short but shady Liana drive, along which are to be seen fine specimens of tropical climbers, including the climbing rattan palm (*Calamus*) and the curious chain-like stems of *Bauhinia anguina*. Reaching a circle here with a water tank in the centre containing interesting water plants, the visitor should stop to visit the Floricultural section, Orchid House, Octagon Conservatory, Fernery, the pergolas of the curious flowered *Aristolochia* (Flycatchers), and other flowering climbers.

Returning to the carriage drive and continuing, a collection of tropical fruit trees is passed on the left, also close to the drive a row of young Talipots—the Majestic palm. On turning the loop of the drive, note on the left some very large specimens of the *Inga Saman* or Rain-tree of tropical South

America. These were introduced about 1850, and are the parents of most of the trees so largely planted for shade along the road-sides throughout the Island. Next to these, close to the drive, is a row of the Cannon-ball tree, also of S. America, bearing along the stem a profusion of curiously shaped flowers in March and April, followed by large brown fruits resembling cannon-balls. Behind are the Nurseries, also a row of the striking buttressed tree known as Java Almond (*Canarium commune*). Farther on, on the left, is a straight avenue of Palmyra palm, which is indigenous to the dry region of Northern Ceylon and Southern India. In the dry regions of Ceylon the Palmyra palm is equal in usefulness to the coconut in the wetter areas.

The drive now passes through an avenue of the Cabbage Palm (*Oreodoxa oleracea*). Farther on, on the left, is a mixed avenue of the fine flowering tree *Brownea grandiceps* and the equally beautiful *Cassia multijuga*. Continuing, the drive skirts the Arboretum and follows the river-bank. Striking glimpses may be obtained across the river of Gangaruwa hill and valley, where the Central Experiment Station of the Dept. of Agriculture is situated. The Great Circle is a fine stretch of circular lawn with a round group of palms in the centre. It was here that the first Rubber Exhibition ever held took place, viz., in 1906. Extending to the North is a straight avenue of the Royal palm (*Oreodoxa regia*). Round the circle are many fine trees, including several planted by Royalties, including one each by King Edward, King George and the Prince of Wales. The Main Central Drive being again reached, it should be followed for a short distance where two roads diverge off on the right. These lead to the Head Offices of the Department of Agriculture and its library,

herbarium, economic museum and laboratory.

The museum is open to the public and contains an interesting collection of botanical exhibits as well as of agricultural products. Returning to the Main Central Drive, the Great Lawn, remarkable for its wide extent and undulating contour, is passed on the right, the Fernery and Floricultural section on the left. Turning to the right, the Monument Road, already referred to, may be taken. Following the lawn and turning to the right again, a row of the fine foliated and flowering tree (*Jacaranda ovalifolia*) is passed on the hillside to the left. Reaching the river drive by the short loop to the left, a good view of the river and the bamboos fringing its banks is obtained. The small lake now reached contains interesting water plants, including the Egyptian Papyrus and the Giant Water-lily (*Victoria regia*). The carriage drive now enters the new Palmetum, planted in 1916. Here also are the remains of what was a very striking avenue of the Talipot palm, the giant of the palm tribe. Behind is the Students' Garden and Pinetum, and farther on a collection of bamboos and screw-pines (*Pandanus*). Here a glimpse may be obtained of the three-spanned iron and concrete bridge which displaced in 1906 the famous one-spanned Satinwood Bridge. (A model of the latter is in the South Kensington Museum.) The tour is completed by returning along the drive to the Main Entrance (observe the handsome Brazil-nut tree).

Crossing the river by the ferry to the Central Experiment Station at Gangaruwa, areas of tea, coffee, cacao, rubber, coconuts, rice and vanilla under experimental culture may be seen, and smaller plots of various fodder grasses and other plants of economic importance in the tropics.

The various tapping and manual experiments with Para rubber are of considerable importance to the rubber industry of the Colony, while in the tea plots the advantages of growing small leguminous shrubs between the tea has been clearly demonstrated. Experiments with cacao and coconuts are being conducted, and comparative trials of rice and many other economic plants carried out. On this Experiment Station are the remains of an old Portuguese Fort, which are being maintained in good condition.

The collections in the laboratories of the Dept. of Agriculture may be inspected by arrangement.

Near the gates are the Kandy race-course and golf links.

75 m. **KANDY** station * (Junction for Matale, p. 762). The capital of the former kingdom of Kandy, 1602 ft. above sea-level; pop. 32,052. Eight hours from Colombo (hotels).

History.—The first authentic mention of Kandy as a city is in the Sagama inscription of the 14th century. In 1542, according to the Mahawansa Chronicle, it became the seat of Vira Vikrama, king of the up-country, but it was not until the close of the 16th century that it was adopted as the capital of the island by Vimala Dharma Suriya I. after the destruction of Kotta and the defeat of Raja Sinha I. of Sitawaka in 1593. During the wars with the Portuguese and Dutch, Kandy was so often burned that scarcely any of the ancient buildings, except the temples and the royal residence, were remaining when the English took it in 1815. A small detachment of British troops was massacred soon after the first capture of Kandy in 1803: memorial stones mark the site. The *Palace*, a wing of which is still occupied by the Government Agent of the Province, consisted of

a number of buildings scattered over the area behind the Temple of the Tooth and along Malabar Street, so called from the dwellings of the "Malabar" or Tamil relatives of the later kings. The improvement of the city was undertaken subsequent to 1803 by the last king, Sri Vikrama Raja Sinha, by whom the Octagon, the main Portico of the Palace (now leading to the Maligawa Temple), and the lake, were either completed or commenced. The Temple, in which the sacred tooth is deposited, well deserves a visit.

Description.—The scenery up to Kandy is magnificent. Kandy is picturesquely situated on the banks of a small artificial lake, overhung on all sides by hills. A road called Lady Horton's Walk winds round one of those hills, and on the E. side, which is almost precipitous, looks down on the valley of Dumbara, through which the Mahaweli-ganga rolls over a channel of rocks, "presenting a scene that in majestic beauty can scarcely be surpassed." In a park at the foot of this acclivity is the Pavilion of the Governor, erected in the thirties of last century.

The **Dalada Maligawa Temple** or "Temple of the Tooth," though not grand or imposing, is one of the most picturesque buildings in Ceylon. It stands with its back against a wooded hill; at its feet lies the long moat or tank, alive with tortoises, and crossed by a small bridge, flanked by two carved stone elephants. Above, an enclosing battlemented wall looks over a flat expanse of the greenest grass dotted over with trees.

In the centre of the courtyard, and occupying the greater part of it, is the sacred building. On a lotus flower of pure gold, hidden under seven concentric bell-shaped metal shrines, increasing in richness as they diminish in size, and

containing jewels of much beauty, now reposes the sacred relic.

The "sacred tooth" is said to have been brought to Ceylon in the reign of Sri Meghavanna, 304-332 A.D. (according to Geiger, 352-379 A.D.), in charge of a Princess of Kalinga, who concealed it in the folds of her hair. It was taken by the Pandians about 1283 A.D., and again carried to India, but was recovered by Parakrama Bahu III. Later on the relic was at Kotta, but in 1560 was discovered by the Portuguese at Jaffna, taken to Goa by Don Constantine de Braganza, and burned by the Archbishop in the presence of the Viceroy and his court. The Buddhists deny the authenticity of the relic so destroyed, and assert that the real tooth was hidden and is the one now at Kandy. This is a piece of discoloured ivory, 2 in. long and less than 1 in. in diameter, resembling the tooth of a crocodile rather than that of a man. There is some evidence to show that Kandy, as well as Kotta, boasted of a tooth relic in the early 16th century. There are many other jewels and ornaments of interest in the shrine, the brazen doors of which merit observation. The eaves of the projecting roof, the massive supporting pillars, corbels, and ceilings are profusely decorated in bright colours with painted figures, grotesque monsters, and floral patterns. The octagon tower contains a fine Oriental library.

The **Kachcheri**, the District Court, and the Supreme Court form three sides of a triangle. The audience hall of the Kandyan Kings (erected 1784-1820) now serves as a Supreme Court House; the carving of the wooden pillars is notable. Near the Kachcheri is the **Kandy Museum** and the Kandyan Art Association. Visitors can see the ancient Kandyan arts practised here, where articles in silver, copper, brass, ivory, etc., are for sale at reasonable prices.

No one should leave Kandy without seeing the **Peradeniya Gardens** (see p. 742).

An interesting excursion may be made to two Buddhist temples. **Lankatilaka Vihare** (4 m. from Peradeniya) was built in 1344: it looks like a Norwegian wooden church. **Gadaladeniya Vihare** of the same date is $\frac{1}{2}$ m. off the Peradeniya-Kadugannuwa road, at a turning 2 m. from Peradeniya on the left. (Consult *Cave's Book of Ceylon*, Colombo, 1913, which contains a chapter by the late Mr J. P. Lewis, on Kandyan architecture.) Motor-cars can proceed within $\frac{1}{4}$ m. of Lankatilaka, but the latter portion of the road is rough, and only fit for traffic in dry weather.

There are many pleasant drives and rides to be taken in the neighbourhood of Kandy; the Upper Lake (or Gregory's) road; Lady Blake's drive; Lady M'Callum drive; and others.

With a motor many delightful and more extensive excursions can be made. The extensive plantations of cacao on the banks of the Mahaweli-ganga, a few miles below Kandy, deserve a visit.

(1) To **Kurunegala**, *via* the (16 m.) **Galagedera (R.H.) Pass** and **Weuda (R.H.)**, where there is good snipe-shooting in season.

(2) To (15 m.) **Teldeniya**★ (R.H.). 6 m. from here is the **Medamaha Nuwara Peak**, on which is an old Sinhalese Fort and City of Refuge. Near the 20th mile is visible a pillar on the right, marking where the last King of Kandy was captured. The road leads on

(3) To **Madugoda (R.H.)**, thence by a minor road to **Weragamtota (R.H.)**, in the Central Province. After this the view Eastwards is one of the finest in the Island. The Mahaweli-ganga is crossed by a ferry (not fit for motors) to **Alutnuwara** (see p. 749), in the

Uva Province. The traveller is now in the Bintenna country. The straight course due north taken by the river is remarkable.

Burrows' *Visitors' Guide to Kandy and Nuwara Eliya*, also Dr Willis's guide-book, may be consulted with advantage.

ROUTE 2.

COLOMBO TO NUWARA ELIYA, BANDARAWELA, BADULLA, and BATTICALOA.

(Rail to Nuwara Eliya and Badulla; motor-omnibus service to Batticaloa).

This route so far as Peradeniya junction is the same as Route 1.

(There is a sleeping-car on the night mails between Colombo and Nanu-oya.)

From Peradeniya the line continues to 78 m. **Gampola** * (1573 ft.) (R.H.). From here a road strikes off to Nuwara Eliya (see p. 747).

87 m. **Nawalapitiya** (1913 ft.), whence a road leads to (22 m.) **Talawakelle** (see below).

From that point the stations are on a constantly rising level to

108 m. **Hatton station**, * 4141 ft. above the sea.

At Hatton roads from Nawalapitiya Dickoya (including Maskeliya and Bogawantalawa) and Talawakelle meet.

The drive to **Talawakele** * (3932 ft.) (12 m.) (see p. 747) is very pleasant. Good views of the very pretty *Devon Falls* and the magnificent *St Clair Falls*. Motor-lorry leaves Talawakele for Diyagama (17 m.) both morning and evening. (See Horton Plains, p. 748.)

From Hatton the ascent of **Adam's Peak** (7353 ft.), the most

celebrated, though not the highest, mountain in Ceylon, is most easily made. It is an expedition of much interest, and the wonderful shadow cast by the peak at sunrise is a sight which will repay the trouble and fatigue. Camoens refers to the peak in his *Lusiads*. The manager of the Adam's Peak Hotel at Hatton makes all arrangements for the visitor. A moonlight night is generally chosen. It is a very beautiful drive of 12 m. to Maskeliya * (4200 ft.) and 14 m. to Laxapana (Raksapana). From here it is 8 m. to the top, the first five fairly easy going, and the last three rough, and possibly likely to be trying to any persons easily made giddy, though the worst places are protected, and chains of very old date facilitate the scramble to the actual summit. Stout boots and warm clothing are needed for the trip, and blankets should be taken up from the hotel—also means of making tea on the summit, which is only 150 ft. sq., where a few Buddhist monks live. Under a wooden canopy is the sacred object of the pilgrimage—an impression of the foot of Buddha on the natural rock. It is about 5½ ft. long and 2½ ft. broad, and varies from 3 in. to 5 in. in depth.

Hatton is also the point from which the great tea-districts of Dikoya and Dimbula may be most conveniently visited. These valleys, formerly celebrated for their production of coffee, are now entirely devoted to tea cultivation. About the year 1870 the coffee plantations were attacked by a new fungus, *Hemileia vastatrix*, which in ten years' time well-nigh destroyed the production of coffee, and reduced the planting community to a state of ruin. With indomitable energy the planting community set itself to work to remedy the disaster, and by the substitution of tea and rubber for coffee they may be said

to have thoroughly succeeded in doing so. By the end of 1924 there were about 418,000 acres under Tea. In 1875 only 282 lb. of tea were exported from Ceylon. The export reached 215,000,000 lb. in 1915; but fell to 184,000,000 lb. in 1920. It was 225,045,992 lb. in 1927.

The **Dikoya Valley** (Ambagamuwa District) is the site for a hydro-electric scheme which, with its developments, is expected to provide a cheap and abundant supply of electrical power in Ceylon. It is proposed to dam the river Kehelgamu-oya at Norton, and erect a power-house at Horowalattenna on the E. bank of the Maskeliya-oya.

The valley of **Maskeliya**, a more newly-valleyed District, is separated by a ridge from that of **Dikoya**, to which it is parallel. The **Dimbula** valley is traversed by a road from **Nawalapitiya** to **Nuwara Eliya**, into which a branch road from **Hatton** leads.

Dikoya is on the motor-bus route from **Hatton** to **Norwood**; and there is another service from **Norwood** to **Maskeliya**.

On leaving **Hatton** the train passes through the longest tunnel on the railway. Just after the 114th mile the very fine *St Clair Falls* are seen on the left (see p. 746).

116 m. **Talawakele station** (R.H.).★ Motor-bus service, 14 m., from **Agrapatna**.

The **Horton Plains** (see p. 748) may be reached by this route, by motor-coach to **Diyaagama** (17 m.), thence on foot or horseback (8 m.).

From **Talawakele** the line again rises steadily to

128 m. **Nanuoya station**¹ (5291

¹ Travellers are recommended to have warm wraps with them, as the temperature here is very much lower than that of the plains, or even of **Kandy**.

ft.). This is the junction for the narrow-gauge railway, which rises 1000 ft. in its last 6½ m., to **Nuwara Eliya** (135 m.) and **Rágala**. For persons who prefer to drive to **Nuwara Eliya** from **Nanuoya** there is (4½ m.) a good road, with an ascent of 1000 ft. A motor-car to meet the train at **Nannoya** can be obtained from the **Grand Motor Works, Hill Club**, or **Messrs Taylor & Co.** at **Nuwara Eliya**.

4½ m. The town of **NUWARA ELIYA** (pop. 6423), ★ the sanatorium of Ceylon, is 6199 ft. above the sea-level. The summer residence of the Governor (*Queen's Cottage*), the **Hill Club**, and **Hotels** are to the N.W. of the lake. Much of the ground about **Nuwara Eliya** is open and moor-like, and is thickly dotted with bushes of crimson *rhododendron*. The cypress and the golden wattle have been largely planted about **Nuwara Eliya**, and give the landscape a peculiar character, which has also a somewhat Italian air imparted to it by the numerous *Kina* trees (*Calophyllum tomentosum*), which, though not a conifer, has a great general resemblance in its habit of growth to a stone-pine. **Nuwara Eliya** possesses a beautiful park and one of the finest golf-courses in the East. It is also the headquarters of the **Ceylon Fishing Club**. The streams in and around **Nuwara Eliya** are well stocked with rainbow trout, which afford good sport in the open season (May–October). In the beautiful climate of this station expeditions of all sorts may be enjoyed.¹ The finest are:—

(1) Round the *Moon Plains*, 5 m. (2) To the top of *Ramboda Pass* and back, 3 m. (3) Round the *Lake*, 6 m. To **Hakgala** (see below), 6 m. *Pidurutalagala*, the highest mountain in Ceylon (8280 ft.), may be easily ascended from

¹ *Burrows' Visitors' Guide to Kandy and Nuwara Eliya* is a useful handbook.

Nuwara Eliya. There is a bridle-path to the top, whence the view is extensive, but not specially striking.

(4) A longer excursion is that to the Horton Plains, 18 m. from Nuwara Eliya (see also under Talawakele, p. 747), *via* Blackpool and the Elk Plains. The easier route is by train to Pattipola, where there is a R.H., and thence by foot or on horseback : distance 6 m.

This excursion will take at least two days, one to go and one to return, and must be made on horseback. A bridle-path through wild and beautiful scenery terminates at a large R.H.,* in the neighbourhood of which are tremendous precipices, which descend to the great plain of the Kalu Ganga. At the "World's End," $\frac{1}{2}$ m. easy walk from the R.H., along a charming jungle path, there is a very striking view. The mountains, Totapola and Kirigalpota (the highest peaks in the island after *Pidurutalagala*), may be ascended from here. The path to the summit of the latter (about 2 hrs. from R.H.) is somewhat difficult ; a guide should be taken. The view is magnificent.

(5) A drive out to **Kandapola** (6½ m.) is very agreeable on a fine day.

(6) The **Botanic Gardens** at **Hakgala**, 6 m. (see below on road to Badulla).

From Nuwara Eliya the traveller may return to (35 m.) **Gampola** (p. 746) by the Ramboda Pass (motor-bus service from Gampola to Ramboda). The pass is negotiated by a series of zigzags. Several very pretty waterfalls are seen at (15 m.) **Ramboda** (R.H.).

Just before entering Gampola the Mahaweli-ganga is crossed.

The drive from Nuwara Eliya to Badulla is extremely picturesque.

There is a motor-bus service to Hakgala and Welimadu (see below).

On leaving Nuwara Eliya the road rises slightly after quitting the lake, and then commences a continuous and for the most part very steep descent of several thousand feet. At 6 m. from Nuwara Eliya we reach the *Botanic Gardens* at **Hakgala** (which derives its name from the resemblance the bare rock above has to a human jaw), a visit to which ought on no account to be omitted by any one making a stay, however short, at Nuwara Eliya. The visitor is equally repaid by the beauty of the views from the gardens, and by the beauty of the gardens themselves, in which all the flowers and plants of temperate climates flourish freely, combined with much beautiful natural vegetation. Behind the Hakgala gardens rises the precipitous wall of bare rock which forms the face of the Hakgala mountain, whilst in front the ground sinks abruptly to valleys and low hills far below, and backed in the distance by the mountains of Uva. A distant view of the camp where the Boer prisoners were confined is to be had from the gardens. The road continues to descend very rapidly to (13 m.) *Wilson's Bungalow* and to **Welimadu** (R.H.), a picturesque village, from which a public road branches off to the right to **Bandarawella** (13 m.).

26 m. **Ettampitiya** (Atampitiya), where we are again on the same level as *Wilson's Bungalow*. The traveller cannot fail to be struck by the extent of terrace-cultivation in the valleys traversed, the steepest hillsides being fashioned into an endless series of narrow terraces, carefully irrigated, on which abundant crops of paddy are grown. From **Ettampitiya** the road again falls continuously until, after passing

Dikwella, where it is joined by the road from Bandarawela, it reaches (37 m.) Badulla (see below).

Nanuoya to Badulla.

The main railway from Nanuoya continues to

138 m. (R.H.) **Pattipola** station. A bridle-path (6 m.) leads to the Horton Plains (see p. 748). Shortly after the train reaches the summit level (6224 ft.). It then enters a tunnel, and emerging, a most magnificent view of the Uva country is disclosed with dramatic suddenness to the left.

153 m. **Haputale** station (4853 ft.) (R.H.) (see p. 754).

156 m. **Diyatalawa** station (4367 ft.). Below, to the left, is seen the **Boer Camp**, where about 5000 prisoners were confined during the South African War. It has been used as a military training camp and sanatorium for the sailors of the East India Station.

161 m. **Bandarawela** station (4036 ft.) (Hotel *).

About 10 m. from Bandarawela are the headquarters of the Errebodde Hunt Club, where the jackal is hunted from October to January. Particulars may be obtained at the Hill Club in Nuwara Eliya.

5½ m. out of Bandarawela, on the way to Badulla, a road breaks off to the right to (7½ m.) **Ella**, where there is a R.H. most beautifully situated. The traveler may continue by this road to (18 m.) Passara (see below) through very fine scenery.

183 m. **BADULLA** station (R.H., pop. 8025 *), the capital of the Province of Uva, one of the oldest, most cheerful, and most attractive towns in Ceylon. It is situated in a hollow entirely surrounded by green paddy-fields, and in the immediate vicinity of a fine river, while on all sides

the background is formed by mountains of very beautiful outline.

Fine avenues of *Inga saman* and other trees adorn the town, which, besides the usual Government buildings — Kachcheri, Government Agent's residence, etc. — contains a handsome market and a fine hospital. There is also an exceedingly pretty race-course surrounding a small lake. It is in the centre of a very flourishing group of tea-estates. The church, the nave of which was built by subscriptions from Kandyan chiefs to the memory of Major Rogers, administrator and sportsman, and the old garrison burial-ground, containing a tomb of 1817, bodily uplifted by a Bo-tree, merit a visit. The fine **Dunhinde Waterfall** is only 3½ m. away, but is rather difficult of access.

Of the ancient city few traces remain. Not a vestige is to be seen of the palace of the kings, and scarcely any indication of any buildings of considerable antiquity. There are, however, two large and wealthy Buddhist temples, the *Mutiyaṅgane Vihare* and the *Kataragama Dewale*, which, though the present edifices are of no very great age, are picturesque and worth a visit. They occupy ancient sites, and the dagoba at the *Mutiyaṅgane Vihare* is undoubtedly of very early origin.

A very interesting excursion may be made from Badulla to **Alutnuwara**, 30 m. N., on the Mahaweli-ganga, where there is an ancient dagoba in the midst of fine scenery. Alutnuwara may also be reached from Kandy, and one of the views on that route at the head of the sudden descent to the great eastern plain is among the finest in Ceylon (p. 745).

Badulla to Batticaloa by road.

Batticaloa is now accessible by rail from Maho Junction (p. 761). 86½ m. from Colombo, on the

line to Jaffna (Route 7). But the motor-coach route from Badulla which is here described, will probably be preferred. The distance is $103\frac{1}{2}$ m., and the approximate time taken is $9\frac{1}{4}$ hrs; fare, first-class, Rs.18.

Leaving the railway at Badulla, the road, which passes chiefly through fine tea-estates, rises rapidly to

12 m. **Passara** (R.H.). From here the traveller may return to Bandarawela by a short road by Ella through beautiful scenery (see p. 749).

Proceeding, the road continues through some of the finest scenery in Ceylon to

25 m. **Lunugala** (R.H.). Here the road descends. Nothing can exceed the beauty of the drive between this place and

36 m. **Bibile** (R.H.), a good starting-point for excursions into the wild and beautiful country to the E. and S. (see p. 774). There are some springs of warm water near here. We are now in the Vedda country, and either here or at the next following Rest-Houses,

47 $\frac{1}{2}$ m. from Badulla iron bridge **Ekiyankumbura** (R.H.) or

57 m. **Galodai** (Kallodai) the traveller is likely to meet with some of these singular specimens of humanity. They are a remnant (4510 at the last census) of the aboriginal inhabitants of Ceylon, and are divided into two classes—the Rock and the Village Veddas. The Rock Veddas are absolute savages, who remain concealed in the forests: the type is fast becoming extinct. The Village Veddas, though often indulging their migratory instincts, live in collections of mud and bark huts, in the vicinity of which they carry on some rude cultivation (see *Wild Ceylon: the Present-day*

Veddas, by R. L. Spittel; (Colombo, 1924)).

67 m. **Maha Oya** (R.H.). Small hospital and dispensary. A very pretty R.H. on the borders of a tank, with excellent shooting in season. At Unuwatura Bubula, 3 m. off, is a spring of hot water.

80 m. **Tumpalancholai** (R.H.).

83 m. a road to left leads to **Rugam Tank**, about $1\frac{1}{2}$ m., restored by Sir H. Ward, and now irrigating a large tract of country. From Bibile to Kumburuwella the traveller passes through what is known as the Bintenna country, where good shooting may be had in season.

93 $\frac{1}{2}$ m. **Chenkaladi** (R.H.). We have now entered a country almost wholly inhabited by Tamils and "Moors," as the Ceylon Muhammadans are called. The familiar dagoba is no longer seen in the villages, and its place is taken by the Hindu pagoda or the mosque. From Rugam onwards the country is highly cultivated and populous.

At Chenkaladi the road from Badulla joins the North Coast road; distance to Trincomalee, about 74 m. (eight ferries to be crossed). Mutur (small Rest House, $\frac{1}{2}$ m. off the North Coast road), on the S. of Koddiiyar Bay, about 57 m. from Chenkaladi, is famous as the scene of the capture of Robert Knox, the author of *An Historical Relation of the Island Ceylon, by Robert Knox, a captive there near twenty years* (1660-1679), published in 1681 (reprint, Maclehose, 1911).

From Chenkaladi the road turns sharply to S.E. to

103 $\frac{1}{2}$ m. **Batticaloa** (R.H., pop. 10,564 *), the capital of the Eastern Province. Batticaloa is situated on an island in a remarkable salt-water lake.

which extends for over 30 m. in length by from 5 m. to 2 m. in breadth, and is separated from the sea by a broad sandy belt now rich with coconut groves, and swarming with Tamil and Moorish villages from one end to the other. The approach to the town by a causeway across the lake is picturesque. The walls of the small old Dutch fort, now containing the Kachcheri, are well preserved. Batticaloa is famous as the abode of that singular natural curiosity the "singing - fish." On calm nights, especially about the time of the full moon, musical sounds are to be heard proceeding from the bottom of the lagoon. They resemble those which are produced by rubbing the rim of a glass vessel with a moistened finger. As a rule not more than two distinct musical notes are heard, one much higher than the other, but credible witnesses, such as Sir E. Tennent, assert that they have heard a multitude of sounds, "each clear and distinct in itself, the sweetest treble mingling with the lowest bass." The people attribute the production of the sound to the shell-fish *Cerithium palustre*. This may be doubtful, but it is unquestionable that the sounds come from the bottom of the lagoon, and may be distinctly heard rising to the surface on all sides of a boat floating on the lake. If a pole be inserted in the water and its upper end applied to the ear, much louder and stronger sounds are heard.

The edible oyster is good and plentiful here.

The Tamils call Batticaloa "Tamarind Island," from the graceful tamarind tree which is frequently seen.

A steamer, which sails from Colombo to Trincomalee and back once a fortnight, calls at Batticaloa. During the N.E. monsoon the steamer calls at Kalkudah (R.H.), 20½ m. N. of Batticaloa. A motor-bus runs daily between

Batticaloa and Demodera. A motor-bus also runs twice weekly from Batticaloa to Badulla, and from Badulla to Batticaloa. There is another service from Batticaloa to Trincomalee (11 hrs., first-class fare, Rs. 14-70).

From Batticaloa there is a good road for some 68 m. to Arugam Bay, thence by track to Palutupane (p. 758), through the *Yala Game Sanctuary*.

The railroad from Batticaloa to Galoya Jn., on the branch line from Maho Jn. to Trincomalee (Route 7) passes through Polonnaruwa and Minneriya (p. 772).

ROUTE 3.

COLOMBO TO RATNAPURA and BANDARAWELA.

Rail to Avisawella, Ratnapura and Opanake; thence by motor-omnibus to Haputale (p. 754), and thence rail to Bandarawela; or, *alternatively*, by motor-omnibus the whole way. As the drive is a beautiful one, the road to Avisawella is described in place of the railway.

For convenience of arrangement this route has been described from Colombo to Bandarawela. The long ascent, however, takes time, and the traveller who has not much leisure is recommended to go to Bandarawela by railway (Route 2), and to return to Colombo by this route.

No excursion could show more of the characteristic features of Ceylon scenery and life than this. It is one strongly recommended to those having time to perform it. The journey to Bandarawela will occupy about three days—one day by train. Those with less time should go as far as Ratnapura, returning to Colombo by the alternative route (No. 4) mentioned on p. 754. To Ratnapura and back by alternative route will occupy more than a day. At Maradana junction the narrow-gauge Kelani Valley Railway (85 m. to Opanake) begins. A rail motor service runs from Homagama stn. (15½ m. from

Colombo) on this line to Yatiyantota (see below) and Ratnapura.

Leaving Colombo by motor-omnibus or car through the narrow and crowded streets of the "Pet-tah," a very pretty road along the S. bank of the Kelani River may be followed, or a more direct but less picturesque road across the plain to

10 m. **Kaduwell**, a R.H. charmingly situated on a bluff of red rocks above the river at a point where it makes a sharp turn. The R.H. veranda all but overhangs the river, and commands a delightful view, enlivened by the constant passage of leaf-thatched barges and sailing-boats, and by the picturesque groups all day crossing the river at the ferry close by. A short distance off is an ancient Buddhist temple of some size. There is also the Irrigation Tank of Mulleriyawa, in great disrepair. The road continues near the river, through a rapid succession of villages and groves, to

21 m. **Hanwella** (R.H.), a large village with a R.H., commanding a beautiful view up and down the river and situated on the site of a Portuguese fort. [9 m. S. of Hanwella is the tank of Labugama, which supplies Colombo with water. It is picturesquely situated among wooded hills, and well repays a visit.] The road now leaves the river and passes through country in which rubber alternates with coconut, and becomes more and more prominent, whilst here and there are patches of tea, to Puwakpittya and

30 m. **Avisawella** Jn. station (R.H. ★), surrounded by country of very great natural beauty, centre of the rubber industry and site of the Kelani Valley Planters' War Memorial. The ruins of a royal palace and a temple destroyed by the Portuguese in the

16th century are still to be seen on the opposite bank of the river, reached by an iron bridge. The railway from Colombo branches here, one section leading to **Yatiyantota** (R.H.), and the other to **Opanake**, the present terminus. A road leading N. from **Avisawella** crosses the **Sitawaka** and **Kelani** Rivers by fine iron bridges, both commanding lovely views, and passes, by **Ruwanwella** (where there is an old Dutch fort converted into a very charming R.H.), through a lovely wooded and undulating country to **Kegalla** (p. 741).

44 m. **Pussella**. The road crosses the **Kuruwiti** River near the village of **Ekneligoda**—in which is situated the picturesque *walawa* of the late **Ekneligoda Dissawe**, a great Sinhalese chief and landholder—and reaches

56 m. **Ratnapura** (R.H., pop. 7014 ★), the capital of the province of **Sabaragamuwa**, with an average rainfall of 149 in. **Ratnapura** is situated in the midst of the most exquisite scenery, and the views from the summit of the fort, the bridge, and the circular road are especially recommended. A ride of a few miles up the bridle-path leading from the bridge to **Gilimale** will amply repay the trouble, revealing as it does the magnificent mountain-wall which rises all but perpendicularly to the N. to the height of many thousand feet. It is from **Ratnapura** that the finest views of **Adam's Peak** are to be obtained. There is a specially good one within a few minutes' walk of the R.H. **Ratnapura** (City of gems) is the headquarters of the gemming industry, and the whole country is dotted with pits from which gems have been removed. **Sapphires**, **topazes**, and **cat's-eyes** are those most commonly found. The *modus operandi* is simple. A pit is dug, and when the *illan*, a peculiar gravel in which the

gems are usually found, is reached, all that is dug up is carefully washed and sifted, and the good stones set aside. *Genuine* stones are certain to be found in large quantities, but stones of any marketable value are more rare, the greater part having only a faint shade of colour, and being disfigured by flaws. Plumbago also is mined for.

A mile or two W. from Ratnapura is the *Maha Saman Dewale*, one of the richest Buddhist temples in Ceylon, and possessed of considerable estates. Some interesting relics are preserved there, but the building itself, though picturesque, has no architectural interest. In the outer court, built into the wall, stands one of the very few monuments of the Portuguese domination remaining in Ceylon—a slab representing the full-length figure of a Portuguese knight in armour killing and trampling upon a prostrate Sinhalese. There is also a round-arched gateway, supposed to be Portuguese.

The ascent of *Adam's Peak* (23 m.) can be made by the following route (see also p. 746) :—

5 m. from Ratnapura is *Malwala*, on the river *Kalu Ganga*.

2 m. farther up the river is *Gilimale*, a large village (horses as a rule cannot proceed farther).

5 m. *Palabaddala*, 1200 ft., halting-station of pilgrims. Here the path becomes very steep and rugged.

8 m. *Heramitipana*, 4400 ft.,* halting-station at the base of the peak.

3 m. farther is the summit of the mountain (7353 ft.), where is a small permanent room built for the accommodation of the resident monks.

Leaving Ratnapura by the bridge, and not forgetting to notice the beautiful views obtain-

able from it, the road passes through paddy-fields fertilised by the Batugedara irrigation works, and after a drive of 12 m. reaches

69 m. *Pelmadulla* (R.H.), whence a road to the S. leads to *Rakwana* (R.H.), the chief village of a rising tea-district. The views on this road are some of the most beautiful in Ceylon. Between Pelmadulla and Rakwana is Madampe, whence there is a motor-bus service N. to Kurunegale (39½ m.) and a road, usually fit for motor traffic, proceeds S.E. to Hambantota on the coast.

From Rakwana an interesting trip may be made Southwards on another road to Hambantota in the Southern province. It is a riding road only, though practicable for bullock-carts in most places. As far as Maduwanwela the scenery is very pretty. At Maduwanwela is a very interesting specimen, the only one known, of the ancient *walawas* of the Kandyan Chiefs. It consists of several small courts built on a sort of Pompeian plan, the small rooms looking into the court, which, as at Pompeii, is in every case furnished with an impluvium. There is a small private chapel (Buddhist), and the massive outer door, made of one huge piece of wood, is marked by bullets and other traces of resistance to assailants in older times. Within is displayed the silver staff shaped like a crozier, the badge of office of one of the ancestors of the family, who was chief Adigar or Prime Minister of the King of Kandy. Afterwards the track leads chiefly through thick forest and jungle, attractive to the sportsman as being a great resort for elephants and deer. After passing the irrigation works on the Walawe River, the main road between Galle and Hambantota is joined at Ambalantota (see p. 758).

The woods about Pelmadulla, at the proper season, are bright with the splendid blooms of the *Dendrobium Maccarthii*.

85 m. Balangoda (R.H.). Nothing can exceed the beauty and variety of the scenery along the whole road from Ratnapura to this place. It is entirely free from that monotony which sometimes renders the most luxuriant tropical scenery oppressive and wearisome.

97 m. Belihuloya. From this spot an ascent can be made to the Horton Plains (see Route 2). The road leads into tea-estates, whence the whole of the wood has been cleared, and the bare hillsides now lack all trace of their original beauty. Ever since leaving Pelmadulla the road, though varied by occasional descents, has been rising, and by the time it has reached

105 m. Haldummulla (R.H.) it has gained a very considerable elevation, from which a truly magnificent view is obtained over all that part of the island lying between Haldummulla and the sea to the S. With few exceptions, the eye seems to range over an unbroken extent of forest, the rivers, villages, and tracts of cultivation being for the most part concealed by the trees surrounding them.

From Haldummulla the traveller may proceed to Koslande (R.H.), thence, passing the very fine Dyaluma Waterfall *en route*, to Wellawaya (R.H.). Tellula (R.H.), some 10 m. to the S., is the nearest point possible for a shooting headquarters.

A very steep road of about 8 m. ascends to the top of the pass at Haputale (R.H.), on the railway line, at an elevation of 4583 ft. The view hence is even grander than that from Haldummulla, but as it partakes to a

greater extent of the nature of a bird's-eye view, it is less picturesque. By road or rail the traveller proceeds to

120 m. Bandarawela (Hotel*) (p. 749), which is said to enjoy the best and most equable climate in Ceylon.

ROUTE 4.

COLOMBO TO RATNAPURA *via* Panadure and Nambapane.

(Rail and road.)

This is an alternative route to Ratnapura, but somewhat longer. It passes through very pretty country, and those who go no farther than Ratnapura are strongly recommended to go by one and return by the other of these routes. The traveller proceeds as far as Panadure by the Southern Railway from Colombo (see Route 5), and completes the journey to Ratnapura by motorbus (3½ hrs.).

A few miles after quitting Panadure the Bolgoda lake is crossed by a bridge, and at

10 m. Horana is reached. The R.H. here is built among the remains of an ancient Buddhist monastery, and on the opposite side of the road is a large and handsome Buddhist temple. It contains a bronze candlestick worthy of notice. It is about 8 ft. high, and of remarkably fine workmanship.

28 m. Nambapane (R.H.), prettily situated. The road here approaches the Kalu Ganga River, along the bank of which it passes as far as the Kuruwiti River, which it crosses. The road now keeps at a greater distance from the river, though it follows its general course till it reaches

42 m. **Ratnapura** (R.H.★) (see p. 752). Shortly before arriving at Ratnapura the Maha Saman Dewale is passed (see p. 753). The whole road is extremely beautiful, and cannot fail, if the day be fine, to give pleasure to those passing along it. Fine views of Adam's Peak and the other principal points of the Central Mountains are to be obtained on this route.

ROUTE 5.

COLOMBO TO GALLE, MATARA, Hambantota, and Tissamaharama.

(Rail to Matara. From Matara to Hambantota motor-bus service daily; also from Hambantota to Tissamaharama.)

The journey is worth making, at all events so far as Galle or Matara, for the sake of the coast scenery. As far as Matara it can be performed by rail, but it is unnecessary to say that much is lost by adopting this mode of travelling. The first five stations—namely, the Fort, Slave Island (the drive from Galle Face Hotel to this station is about $\frac{1}{2}$ m.), Kollupitiya (Colpetty), Bambalapitya, and Wellawatta, are all in the suburbs of Colombo.

At 7 m. is **Mount Lavinia** station (hotel) (see p. 740).

17½ m. **Moratuwa** station is a very flourishing place with an important College. It is justly celebrated for its wood-carving.

21 m. **Panadure** station (R.H.), a flourishing village prettily situated on a narrow inlet of the sea (motor-omnibus to Ratnapura; see Route 4).

26 m. **Kalutara** station (R.H.★) is approached by a fine iron bridge over the Kalu Ganga. It is over 1200 ft. long, being composed of

twelve spans of 100 ft. each. Kalutara is a large place, with a great air of cheerfulness and comfort. On the site of the residence of the Asst. Govt. Agent was a Portuguese fort, and later a Dutch fort. The R.H. is a good starting-point for the excursions which may be made over excellent roads into the very pretty country to the E., which is the premier rubber-growing area of the island. Snipe and whistling teal are plentiful from November to February. The hog-deer (*Cervus porcinus*), not found anywhere else in Ceylon, is said to have been introduced into the Kalutara District by the Dutch from its home in the Ganges Delta.

The Mangosteen grows well in Kalutara. Its fruit, at once pleasing to the eye and delicious to the palate, is recommended to the attention of the traveller.

Plumbago, or graphite, is largely mined for in the Kalutara District. Ornamental basket-, mat- and hat-weaving with the leaf of the "Indi" palm has been recently developed. There is a Govt. model distillery at Kalutara.

41 m. **Alutgama** station for Bentota (R.H. very good) on the other side of the river; celebrated for its oysters and a favourite week-end resort. The drive to Galle from here is charming, always near and generally within sight of the sea, and passing under an uninterrupted grove of coconut and other trees. The district is extremely populous, and the traveller is rarely, if ever, out of sight of a house or two, while villages of greater or less size are of constant occurrence.

54 m. **Ambalangoda** station serves a large and rapidly increasing village. The R.H. (good) is close to the sea, and has a good bathing-place among the rocks below it.

61 m. **Hikkaduwa** station (R.H.); good sea-bathing.

65 m. **Dodanduwa** station. There is a fine Buddhist temple here in a somewhat unusual position, approached by a long, narrow, and steep flight of stone stairs.

72 m. **GALLE** (pop. 39,539) ★ was the principal port of call for vessels between Aden and the far East, before the completion of the break-water at Colombo. The harbour at Galle is very small and difficult to make in rough weather. The entrance is so narrow as to be hardly visible until very near. *The Light-house* is about 60 ft. high. To the E. there is a hill 2170 ft. high called the Haycock, and in the distance to the E.N.E. Adam's Peak, 7353 ft. high, is often seen. The Haycock is known in Sinhalese as "Hinidum Kanda." It is about $1\frac{1}{2}$ m. from the Rest House at Hiniduma. There is a winding path by which the summit of the hill can be approached. The landing-place at Galle is on the N. side of the harbour. The deep water comes close into the shore. *All Saints' Church* is about a furlong from the landing-place. It is a handsome stone building of pointed architecture, and can seat 500 persons. Adjoining is a quaint old Dutch church (1752-54), containing interesting monuments. The ramparts of the old fort form a charming promenade towards the sea.

The place is hardly mentioned in the native chronicles before 1267. Ibn Batuta, in the middle of the 14th century, calls it a small town. It was not till the Portuguese occupation that it rose to importance. When the Dutch succeeded the Portuguese they greatly strengthened the fortifications, which had been vigorously defended against their Admiral, Kosten. The magnificent old Dutch fort, which encloses the older part of the town, is in almost perfect preservation. In the marriage treaty of the Infanta of Portugal with Charles II. of Eng-

land it was agreed that if the Portuguese recovered Ceylon they were to hand over Galle to the English, but they never did recover it.

The name of Galle is from the Sinhalese *gala*, a rock; but the Portuguese and Dutch settlers derived it from the Latin *gallus*, a cock, and carved an image of a cock on the front of the old Government House, now occupied by an European firm, which dated from 1687. The present Government House is the "Residency," which is about $\frac{1}{2}$ m. from the fort. The "Kerkhof" or Dutch burial-ground outside the Fort bears the date 1796. The environs of Galle are charming, and a number of pleasant and interesting excursions may be made among them. The scenery is always delightful, and there are many old and curious Buddhist monasteries to be explored. Buddhism is here seen in its best aspect. The monks are far more austere and more intelligent than in the Kandyan provinces, and the religion seems to exercise a greater influence over the lives of the people.

The **Pettah** is a busy centre of native traders about $\frac{1}{2}$ m. from the fort. There is an orphanage for girls known as "Buona Vista" at Unawatuna, in Talpe Pattu.

There is a large Catholic cathedral on Mount Calvary Hill at Kaluwella, known as St Mary's.

Akkmimana is about $5\frac{1}{2}$ m. from the fort. It is known as the "Gabadagama" (granary) of the Galle Four Gravets. Paddy growing is very systematically carried on. At one time there was a sitting Magistrate here; he is said to have held Court at the old R.H. premises. There is at present a Gansabhawa. The headworks of the Galle water supply are about 2 $\frac{1}{2}$ m. from the Gansabhawa. They are known as "Hiyare Waterworks."

Wakwella is about 5 m. from the fort. There is a fair R.H. on the banks of the Ginganga. Angling and snipe shooting.

91 m. Weligama station (R.H.), a populous and thriving village, beautifully situated on the lovely little bay of the same name. Half a mile before entering the village, on the right-hand side of the high road from Galle, is a remarkable rock-cut colossal statue of a Sinhalese king in perfect preservation. The statue is popularly styled that of the "Leper King," but the legends attached to it are obscure and contradictory.

The road continues along the sea-shore, through an almost uninterrupted grove of coconut trees, which overshadow a constant succession of picturesque fishing villages. The whole District is densely populated, and the drive one of the most charming character. The journey is worth making for the sake of the coast scenery, especially in the vicinity of Tangalla. As far as Matara it can be performed by rail. The best way to see the country is to travel by motor along the coast road.

101 m. Matara station, the railway terminus,* the birthplace of Sir Henry Lawrence (1806), and of Sir George Lawrence (1805), a large and flourishing town of about 17,000 inhabitants. The Nilwala Ganga is here crossed by a fine bridge. Matara itself is a particularly pretty and pleasing town, and is the residence of many of the oldest and richest Sinhalese lowland families. In the fort there is a R.H. and a handsome clock tower.

At Matara there is a Buddhist hermitage called Chula Lanka. It is an islet connected with the mainland by a causeway, and founded as a Buddhist seminary by a Siamese Prince Priest.

Motor-bus services along the

coast to (51 m.) Hambantota; to Hakmana inland; and to (43 m.) Deniyaya, a planting district in the hill-country.

104 m. Dondra, a fishing village situated on the southernmost point of Ceylon. There was here a stately temple, destroyed by the Portuguese, of which few fragments now remain. There is, however, in the modern vihara a fine gateway elaborately sculptured, and about $\frac{1}{2}$ m. to the N. is a stone cell in perfect preservation. On the headland about 1 m. to the S. of the road, is a magnificent lighthouse, erected at great cost in 1889.

The villages, though still frequent, now become fewer in number.

114 m. Dikwella (R.H. good). About 1 m. inland is the Wewrukannala temple, a shrine greatly revered, with remarkable statues and tableaux. The temple is very interesting as showing the modern tendency of popular Buddhist religious art.

122 m. Tangalla, a pretty town with a remarkably good R.H. close to the sea. Tangalla is a great place for catching turtles.

N. of Tangalla are the extensive irrigation works of the Kirama valley and the large tank of Udukiriwila, a few miles to the S. of which is situated one of the oldest and most remarkable Buddhist monasteries in Ceylon — Mulgirigala, an isolated rock rising abruptly from the plain, and honeycombed with caves and temples.

130 m. Ranna (R.H. good). About a mile before reaching it we see on the S. a picturesque Buddhist temple on the summit of a high, wooded rock.

The population now becomes far more sparse, and the country is covered with scrub jungle, containing peacocks.

140 m. Ambalantota (R.H. good), a small village on the banks of the Walawe River, a noble stream here shrouded in dense forest, and crossed by a long iron bridge.

10 m. N. of Ambalantota are the headworks of the Walawe Irrigation Scheme. A massive stone dam, constructed by Government, diverts part of the stream into a system of canals and channels, which convey water for agricultural purposes for many miles on the W. bank of the river.

The road now passes through a desolate country to

148 m. Hambantota (R.H.), the chief place of an Assistant Agency, a small town on a small, open bay. Here are the headquarters of the District, the Assistant Agent's residence, the Kachcheri, Court-house, etc. Here, too, is one of the two chief salt manufactories in Ceylon. A great part of the population are Malays. In the immediate vicinity of the town are sand-hills (which long threatened to overwhelm the town, and have, in fact, buried several streets), the old post-office, and some other buildings. Their onward progress is now checked by the growth of a peculiar grass, and by plantations of the palmyra palm. Motor-bus service to Tissamaharama, *via* Wirawila (see below).

About 20 m. N.E. of Hambantota is Tissamaharama, one of the oldest of the abandoned royal cities of Ceylon. Except as a place of pilgrimage, the site had been wholly abandoned till the restoration of three tanks by the Ceylon Government. From these tanks nearly six thousand acres are now cultivated in paddy, and both population and the area under cultivation are annually increasing. The ruins are of great antiquity and interest. One of the oldest and largest of the dagobas, over 150 ft. high, which was in a very ruinous condition,

has been entirely restored by the unassisted labour of the Buddhist population. There are several other very large dagobas, mostly in ruins, and some smaller ones in fair condition. The remains of large buildings are numerous, and the ruins of what is styled the King's palace, but is more probably the lower storey of a many-storeyed monastery like the *Brasen Palace* at Anuradhapura (p. 767), are worthy of notice. They consist of rows of huge monolithic columns, much larger than any at Anuradhapura or Polonnaruwa. Ruins are everywhere scattered through the dense forest.

There are two ways of reaching Tissamaharama from Hambantota—

(1) The easiest route is that by the high-road to Badulla. On leaving Hambantota the great *lewayas*, or natural salt-pans, whence great amounts of salt, a Government monopoly, are annually taken, are passed. When the salt has formed in them they present the appearance of frozen lakes covered with snow of dazzling whiteness.

15 m. Wirawila (R.H.). The high-road is here left, and about 5 m. of metalled road lead to the R.H. above the tank.

(2) A more interesting, but from Bundala (12 m.) onwards a difficult, route is along the coast 21 m. to Kirinda, a small port of picturesque appearance. There is a road thence to Tissamaharama, about 8 m. in length, which passes many remains of antiquity.

6 m. beyond Kirinda, along the coast, is Palutupana, an excellent centre for shooting excursions, as elephants, wild buffaloes, bears, leopards, deer, and peacocks abound in the wild and unpeopled forests and plains around it. In the jungle is an old British fort, erected in 1813 and called Fort

Brownrigg after the Governor who laid the foundation-stone.

From Palutupana there is a track, good for horses and generally passable for a rough bullock-cart, to Batticaloa (130 m.) (see p. 671). The forest scenery on the *Yala River* is very beautiful, and the whole route presents great attractions to the sportsman.

ROUTE 6.

COLOMBO to Negombo, Chilaw, and Puttalam; thence by road to **Anuradhapura and Trincomalee**.

Railway to Puttalam: thence by motor-omnibus. Both Anuradhapura (p. 764) and Trincomalee (p. 773) are accessible by rail from Colombo. (See Routes 7 and 8.)

9 m. from Colombo, **Ragama** (p. 741).

13 m. **Jaela** (R.H.).

23 m. **Negombo** (first-class R.H.; accommodation can be booked by telephone from Colombo *), a thriving town (pop. 21,000), picturesquely and singularly situated among lagoons and canals—a true Dutch settlement. There is a picturesque Dutch gateway (dated 1672) which “improvers” have, happily, as yet failed to remove, and a banyan tree of magnificent dimensions. The District Judge’s residence is an old Dutch house, dated 1682. The brass-work of Negombo is celebrated; also its crabs and prawns. The whole District between Colombo and Negombo is densely inhabited. The innumerable villages are scattered through coconut groves, cinnamon gardens, and groves of jack-fruit. The artist and the photographer can find at every corner of the numerous roads and lanes an inexhaustible variety of vignettes of striking beauty. Leaving Negombo, the road crosses the

Maha Oya by a fine bridge, about 400 ft. in length, and proceeds through luxuriant coconut groves and tobacco plantations to

36 m. **Maravila** (R.H., good *), $2\frac{1}{2}$ m. from Nattandiya station: a village rapidly increasing in size and importance. Near it is an enormous and very costly Roman Catholic church. One of the most striking features on this route is the number and size of the Roman Catholic churches, erected for the most part by the people of the fishing villages along the coast, who almost all profess that religion.

50 m. **Chilaw** (R.H. good), a large town with a District Court. Here is another huge Roman Catholic church. A large Hindu temple at Munneseram, in the neighbourhood, is worth a visit. There is a road from Chilaw to Kurunegala (p. 761) passing Dandagamuwa, where there is a picturesque temple. 4 m. beyond Chilaw the great river Deduru Oya is passed by an iron bridge. A good road, through a flat, jungle country, which, however, is being rapidly covered with thriving coconut plantations, leads to

63 m. **Battulu Oya** stn. (R.H.), where another large river is crossed by an iron bridge. The road continues through extensive coconut plantations to

Madurankuli stn. (76 m.) (R.H.), and to

82½ m. **Puttalam** (R.H. good), a considerable place, the terminus of the railway, and headquarters of an Assistant Government Agent. The Court-house was designed by Sir Arthur Gordon (Lord Stanmore), when Governor. The island is mainly supplied with salt from this place or Hambantota. The right season to visit is

June to Sept. Salt is a Government monopoly. On the tongue of land which lies between Puttalam Lake and the sea is St Anna's Roman Catholic Church. On the Saints' festival, the 26th July, enormous crowds go thither on pilgrimage—Buddhists, Muhammadans, Hindus, as well as Roman Catholics and other Christian sects; a regular town of palm huts is formed for their accommodation.

A canal connects Puttalam with Negombo and Colombo. It is much used for the transport of salt and copra.

Roads lead from Puttalam to Kurunegala (motor-bus service, 4½ hrs.) and along the coast to Mannar; the latter runs through very wild country, and is not much used, being for the greater part of the distance a natural track through the jungle.

The road to Anuradhapura (motor-bus service, 3½ hrs.) strikes inland, and proceeds through a thinly populated jungle district. There are no Rest Houses this side of Anuradhapura nor any villages where supplies can be obtained. The road, however, is good and often used by motors.

At 103 m. **Kala Oya**, there is an unfurnished Circuit Bungalow of the P.W.D. The *Kala Oya River* is here crossed by a bridge 55 ft. above the ordinary level of the stream, which was, nevertheless, carried away by a flood in 1885.

127 m. Anuradhapura (Hotel) (see p. 764). Railway stn. on the line from Colombo to Talaimannar and Jaffna (Route 7). Motor-bus services to (65½ m.) Trincomalee in about 4 hrs.

The road from Anuradhapura to Trincomalee passes through

135 m. Mihintale (R.H.) (see p. 768). The road journey can be continued to Polonnaruwa (p. 771), Sigiriya (p. 763), and Kandy (p.

744). After leaving Mihintale the road to Trincomalee (constructed 1886) passes through a thinly inhabited country, the villages, with their tanks and cultivation, being sparsely scattered through the forest.

160 m. Horowupotana (R.H.). A large tank and village.

177 m. Pankulam (P.W.D. Bungalow). At Kanniya, 9 m. from Pankulam, and 6 m. from Trincomalee, there are seven hot springs. They are considered equally sacred by Buddhists, Hindus, and Muhammadans, and the ruins of a dagoba, a temple of Vishnu, and a mosque stand together in the immediate vicinity.

192 m. Trincomalee (see p. 773).

ROUTE 7.

COLOMBO to TALAIMANNAR (for **Dhanushkodi** and **South India**) *via* **Polgahawela**, **Kurunegala**, **Maha Junction** (for **Trincomalee**, **Polonnaruwa**, and **Batticaloa**), **Anuradhapura**, and **Medawachchiya** (for **Jaffna** and **Kankasantural**).

Colombo Fort to Talaimannar, 209½ m. by rail. Sea-passage to Dhanushkodi, about 1½ hrs. The Customs examination is held on board the steamer. Currency notes can also be changed on board. A breakfast car is attached to the mail train which leaves Dhanushkodi on the arrival of the steamer (9.30 A.M.), and there is also a refreshment car on the mail train which leaves Talaimannar for Colombo at 8.15 P.M. Travellers to and from India by the mail route can visit both Kandy and Anuradhapura in the course of the journey.

The route taken by the Ceylon-India Boat Mail train from Colombo to

45 m. Polgahawela, R. (R.H.), the junction for Kandy, is described in Route 1.

58½ m. **Kurunegala** (R.H.; motors and motor supplies obtainable; telephone to Colombo), the chief town of the North-Western Province, is situated at the back of a chain of rocks, which from their fancied resemblance to animal forms bear such names as **Etagala**, or **Elephant Rock**, **Ibbagala**, or **Tortoise Rock**, **Andagala**, or **Bel Rock**, etc. Kurunegala town itself is situated at the foot of **Etagala**—an enormous black boulder over 1000 ft. in height, resembling the head and shoulders of an elephant. From the top of this rock a noble view is obtained. At its foot is an artificial lake. 12 m. N.E. of Kurunegala is the **Ridi** (or silver) **Vihare**, a very ancient Buddhist monastery, most picturesquely situated at a considerable elevation. (Good motoring road to within ¼ m. of the temple.) It contains a large and rare collection of ancient ola (palm-leaf) volumes of the Buddhist Scriptures. Some of the doors of the temple are carved and inlaid in ivory.

From Kurunegala there are good roads S.W. to Negombo and N.W. to Puttalam (see Route 6). The road from Kurunegala to Negombo, passing through **Narammala** (R.H.) **Dambadeniya**, **Giriulla** (R.H.) and **Welihinda** is very pleasing from its varying character and constant succession of woodlands, paddy-fields and coconut groves. At **Dambadeniya**, 19 m. from Kurunegala, is a large and famous temple, close to which is a high, apparently inaccessible isolated rock, on which, according to tradition, prisoners were confined. The steps cut in the rock are, according to tradition, the work of a prisoner who attempted to escape.

12 m. from Kurunegala, on the road to Puttalam is **Wariyapola** (R.H.). 3 m. beyond this the road branches off to **Anuradhapura**. 10 m. beyond the junction, after

crossing the **Deduru Oya** by a causeway (not fordable by motor in wet weather, and avoidable by making a short detour *viâ* **Nikarawatiya**, where there is a R.H.).

86 m. from Colombo, **Maho** (R.H.); junction for the line to **Trincomalee** (184 m. from Colombo). At **Galoya**, 55 m. from Maho on this line is a branch line to **Polonnaruwa** (p. 771) and **Batticaloa** (217 m. from Colombo). For Trincomalee, see p. 773; Batticaloa, p. 750. **Kalawewa** (26 m.) and **Kekirawa** (31 m.) are stations on the Trincomalee branch (see p. 763). 2½ m. from Maho is **Yapahuwa** (=the excellent mountain), one of the most picturesque and curious of the remains of antiquity in Ceylon. It was at one time the abode of the sacred tooth in a **Dalada Maligawa** (tooth-temple); hence the tooth-relic was carried off to India, and recovered by **Parakrama Bahu III.** in 1288 A.D. The ruins, possibly of a royal palace, standing at the head of a great flight of steps, are quite unique; the decorative sculptures of animals and human figures are particularly fine. Its traceried windows, one of which is in the Museum at Colombo, are especially curious.

99½ m. from Colombo, **Galgamuwa** station. At the kraal held in 1920, 35 elephants out of 39 were noosed near here. 5 m. from **Galgamuwa** on the **Anuradhapura** road, and thence 2 m. along a village road, are the ancient ruins of **Rajangana**.

92½ m. **Ambanpola**.

126½ m. **Anuradhapura** station, R. (Hotel) (see pp. 764-768).

142½ m. **Medawachchiya** (R.H. 2½ m.). Junction for the line running N. to (102½ m. from **Medawachchiya**) **Jaffna** and **Kankasanturai**. The country is de-

scribed in Route 8 (p. 768). The stations are: 14 $\frac{3}{4}$ m. **Vavuniya** (R.H.), 42 $\frac{3}{4}$ m. **Mankulam** (R.H.), 58 $\frac{1}{2}$ m. **Iranaimadu**, 71 $\frac{1}{2}$ m. **Elephant Pass** (R.H.), 79 m. **Pallai** (R.H.), and 256 $\frac{1}{2}$ m. from Colombo, **Jaffna** (p. 769).

From Medawachchiya the boat-train proceeds to

192 $\frac{1}{2}$ m. **Mannar** station. Mannar is a dreary spot, commanded by a picturesque old Dutch fort, and only remarkable for the number of the African *Baobabs*, which grow freely there, having probably been imported by Arabs in the Middle Ages. The church in the Fort contains some 16th-century Portuguese tombstones.

Due S. of Mannar, and half way between it and Puttalam, is *Marichchukaddi*, the scene of the camp for the Pearl Fishery in 1905, when the enormous number of 50 millions of oysters was fished. The Pearl Banks were leased by the Government to a London Company for 20 years at a rental of Rs.310,000 per annum, but in the year 1912 the Company went into liquidation and the Government resumed possession. No fishing has been held since 1925. The "Banks" lie mostly in the Gulf of Mannar at a depth of about 7 fathoms. The Pearl Banks of Ceylon have excited the cupidity of the nations of all ages from the Phœnicians onwards. There is a large literature on the subject. The enquirer is referred to the modern monograph on the subject by Mr James Hornell (formerly the marine biologist to the Ceylon Govt.), who propounded a theory as to the true causation of the Orient pearl in the body of the oyster.

207 $\frac{1}{2}$ m. **Talaimannar**, at the N.W. point of the island. 2 m. farther on is **Talaimannar Pier**, whence passengers for Madras and S. India cross to (22 m.) Dhanushkodi by a steamer of the S. Indian Railway (see p. 680, Route 36).

ROUTE 8.

KANDY to **Matale**; thence by road *viâ* Dambulla to **ANURADHAPURA**, **Mihintale** and **Jaffna**.

The railway on leaving Kandy (p. 744) crosses the *Mahaweli-ganga* by a fine bridge and continues to

16 m. **Matale terminus station** (R.H. good), a beautifully situated town; a great cattle centre, it has one of the largest bazars in the province. Tea, rubber and cacao plantations, together with coconut and other palm-trees, and paddy-fields, mixed with indigenous scrub and patches of jungle, form a pleasing panorama. The ground is well broken and beautifully varied with wood and cultivation. On the hill above Saxton Park are remains of Fort Macdowall, called after the General Commanding in the Kandyan War of 1803. About a couple of miles out of Matale, only a few hundred yards from the roadside, is the remarkable Buddhist temple of *Alu Vihara*, which it is well worth stopping for a few minutes to visit. Huge masses of granite rock have, at some remote period, fallen from the mountains overhanging the valley. In the fissures of these boulders, at a considerable height above the road, the monastery has been constructed. It is difficult to imagine a site more picturesque or more theatrical.

From Matale a motor-omnibus runs to Anuradhapura *viâ* Dambulla.

30 m. **Nalanda**. The R.H. ★ is prettily situated under fine trees. A steep descent leads to a bridge, a path from which, of about $\frac{1}{2}$ m. to the E., conducts the traveller to the ruins of a *Hindu temple* beautifully situated. The road for the first 5 m. after leaving

Nalanda is very pleasing, passing through fine open woods, among the trees, of which peeps of bare, rocky mountains and a rushing stream are obtained. Nalanda was at one time the residence, not the capital, of Parakrama the Great, who built a fortress there. At Naula a road to the W. leads to Elahera, the headworks of an ancient irrigation system of colossal dimensions.

45 m. **Dambulla** (Dambool) (R.H. ★), a large village immediately under the huge black rock in which is situated the **Cave Temple** that makes this place famous. Sir Emerson Tennent says: "From its antiquity, its magnitude, and the richness of its decoration, it is by far the most renowned in Ceylon." There is a fine view from the top of the rock. The temple has large landed possessions in the neighbourhood. There are five temples in all: they display a mixture of Hinduism and Buddhism: one has a recumbent statue of Buddha, 47 ft. long.

10 m. or 12 m. from Dambulla is **Sigiriya** (R.H.), which is well worth a visit. The R.H. keeper at Dambulla will afford all information and make the necessary arrangements. It is best to go overnight to Sigiriya and ascend the rock early in the morning, returning the same morning or that afternoon to Dambulla. Sigiriya is a rock fortress to which the parricide King Kasyapa retired (to avoid his brother Moggallana's vengeance) in the 5th century, after obtaining the throne of Ceylon by the murder of his father, Dhatu Sena. Here he built his palace and reigned 18 years from 477, or 511 A.D. This extraordinary natural stronghold is situated in the heart of the great central forest, above which it rises abruptly. There are but few traces of the hand of man remaining upon the rock, except some

galleries on the N.W. side and some frescoes high up in a cavity near its summit—accessible by the aid of some iron ladders and steps cut in the rock. Copies may be seen in the Museum at Colombo (see p. 739). The Palace, the site of which is just traceable on the N.W. side, and the rock itself, are supposed to have been surrounded by a fosse; a tank still exists on the S.W. side. The Lion Staircase House, the granite throne, the Audience Hall, and the dagoba ($\frac{1}{2}$ m. from the rock, but close to the road) should also be seen. Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*, Mitton's *The Lost Cities of Ceylon*, chap. xi. and Bell's *Archæological Reports* may be consulted.

3 m. after leaving Dambulla the **Mirisgani Oya** is crossed by a very high bridge. Immediately after passing it the road divides. The road straight on leads N.E. to Trincomalee (see Route 9); 4 m. along this road, on the right, just opposite to a Public Works barracks, or "lines," is the turn off to Sigiriya. The branch turning to the left, N., is that for Anuradhapura and Jaffna, and passes over an undulating park-like country, and past many newly-restored irrigation works to

58 m. **Kekirawa** (R.H. ★). Station on the branch line from Maho Junction (p. 761) to Trincomalee.

From Kekirawa an expedition should be made, 8 m. by good motor-road, to the Great **Tank of Kalawewa** ★ (also reached by rail from Maho Junction on the line to Trincomalee). This magnificent sheet of water, with an area of about 7 sq. m., was originally formed by King Dhatu Sena about 460 A.D., who built a bund 6 m. long, 60 ft. high, and 20 ft. broad on the top. This bund retains the waters of two rivers, and forms a lake which even now, when the

spill only reaches a height of 25 ft., has a contour of nearly 40 m. A great canal from one of the sluices of this tank carries water to Anuradhapura, a distance of 54 m., and supplies over 100 village tanks in its course. A few miles of the canal at the end nearest Anuradhapura were restored by Sir William Gregory about 50 years ago, but the tank itself and the remainder of the canal remained in ruin, as they had been for many centuries, till 1884, when the Ceylon Government decided to restore them. The work was completed at the end of 1887. The bungalow of the engineer in charge commands a fine view over the lake. The ancient spill, 260 ft. long, 200 ft. wide, and 40 ft. high, is still in perfect preservation, the tank having been destroyed, not by any failure of the spill, but by an enormous breach on one side of it—now covered by the new spill wall, a fine structure over 1000 ft. in length, which reflects much credit on its designer and builder, Mr W. Wrightson, of the Ceylon Public Works Department. 2 m. W. of Kalawewa is the Aukana Vihara, an ancient monastery in a wild and secluded situation, where is an enormous rock-cut standing statue of Buddha, 40 ft. high. The statue stands almost entirely free of the rock from which it is carved, and the right arm is raised and free from the body of the statue. At the foot of the bund are ruins of the very ancient city of Vijitapura, sometimes, but doubtfully, identified with Wijito.

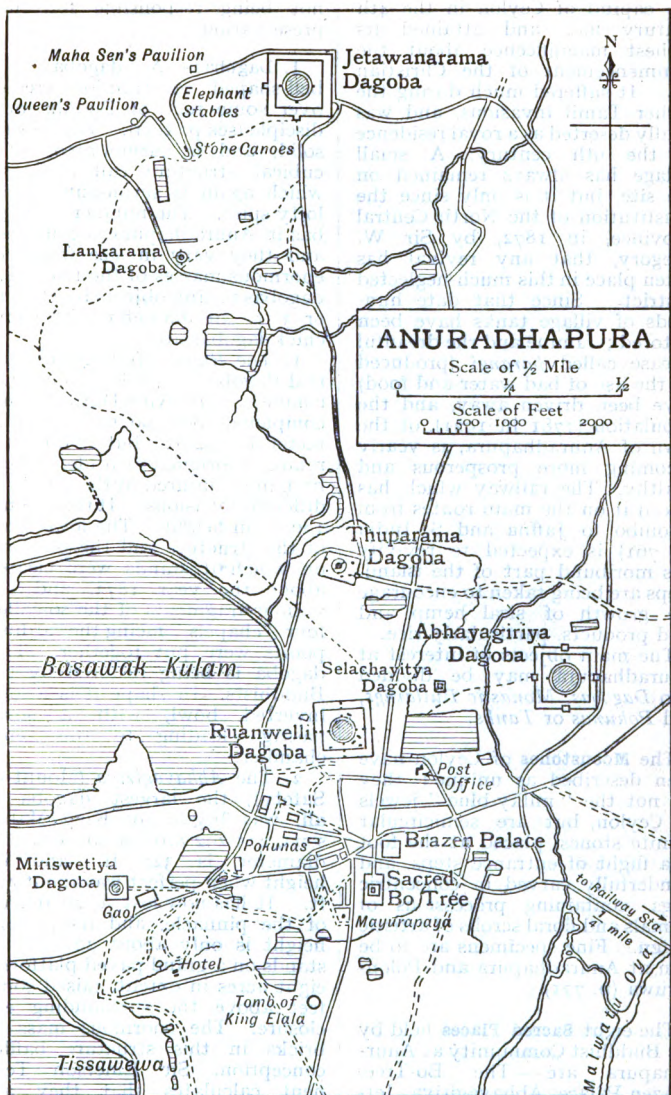
The road from Kekirawa passes for the most part through monotonous and uninteresting forest to

72 m. Tirapane (R.H.). 4 m. farther, at Galkulama, there is a division in the road. The branch leading due N. is the direct road to Jafna through Mihintale; that to the N.W. proceeds in nearly a straight line to

86 m. **ANURADHAPURA** (Hotel good *) (126½ m. from Colombo by rail, see p. 761). "The buried city of Ceylon," famous throughout the East for its ancient and extremely interesting ruins—the relics of a civilisation that existed more than 2000 years ago, when the city was the capital of a succession of ancient kings. The city is said to have measured 250 sq. m., i.e., 16 m. in each direction: rather it comprised two cities, one within the other. A motor-car to visit the ruins can be arranged by the manager of the hotel; also the services of licensed guides. Fees due to Guides—whole day, Rs. 5; half-day, Rs. 3. The traveller who contemplates a thorough examination of the ruins will obtain all necessary information and assistance at the Kachcheri. For such an examination the companionship of Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*, Still's *Guide to the Ancient Capitals of Ceylon*, Mitton's *Lost Cities of Ceylon*, chaps. iii–ix, and Bell's *Archæological Reports* will be useful, though the ordinary traveller will perhaps find the chapter on Ceylon in Fergusson's *Eastern Architecture* sufficient for him. The hdqrs. of the Archæological Commr. of the Arch. Survey are at Anuradhapura.

A certain number of the ruins lie within 1½ m. of the hotel, the so-called Brazen Palace and the Bo-Tree being close to it on the E. side, and the Thuparama and Ruanwelli dagobas on the N.E. The larger Jetawanarama and Abhayagiriya dagobas lie respectively 2 m. and 1 m. N. and N.E. of the hotel. The map opposite shows the general disposition of the ruins; they cannot be thoroughly seen in less than two days' time if a visit to Mihintale is included.

Anuradhapura was founded by King Pandukabhaya 437 B.C., and called after the name of the constellation Anuradha. It became



Emery Walker Ltd. sc.

the capital of Ceylon in the 4th century B.C., and attained its highest magnificence about the commencement of the Christian era. It suffered much during the earlier Tamil invasions, and was finally deserted as a royal residence in the 9th century. A small village has always remained on the site, but it is only since the constitution of the North Central Province, in 1872, by Sir W. Gregory, that any revival has taken place in this much-neglected District. Since that date hundreds of village tanks have been restored; famine and the dreadful disease called *parangi* (produced by the use of bad water and food) have been driven away, and the population (7781 in 1921), of the town of Anuradhapura, is yearly becoming more prosperous and healthy. The railway which has placed it on the main routes from Colombo to Jaffna and S. India (p. 761) is expected to revivify this moribund part of the island. Steps are being taken to encourage the growth of sisal hemp and food products, particularly rice.

The main objects of interest at Anuradhapura may be divided into *Dagobas*, *Monastic Buildings*, and *Pokunas* or *Tanks*.

The **Moonstones** of Ceylon have been described as unique: they are not the "milky-blue" jewels of Ceylon, but are semicircular granite stones, placed at the foot of a flight of entrance steps, and wonderfully carved in concentric rings, containing processions of animals and floral scrolls of artistic design. Fine specimens are to be seen at Anuradhapura and Polonnaruwa (p. 771).

The eight **Sacred Places** held by the Buddhist Community at Anuradhapura are—The Bo-Tree, Brazen Palace, Abhayagiriya, Jetawanarama, Lankarama, Mirisewetiya, Ruanwelli, Thuparama dagobas—the archæological authorities

not being responsible for their preservation.

I. Dagobas.—A dagoba is a bell-shaped construction erected over some relic of Buddha or a disciple (see p. xcvi). It is always solid, and is surmounted by a cubical structure called the *hi*, which again is surmounted by a lofty spire. The number of dagobas in Anuradhapura is countless, and they vary in size from the enormous masses of the four great dagobas to tiny objects barely 2 ft. or 3 ft. in diameter. The four chief dagobas are—

1. The *Ruanwelli Dagoba* was a real dagoba, i.e., relic storehouse, commenced by King Dutugemunu, completed about 90 B.C. Its diameter is 252 ft., but it does not retain its original altitude, having been much injured by the Tamils in different invasions. It is now only 180 ft. in height. The lower part of the structure and the platform on which it stands were cleared about the year 1873, and the various fragments of the so-called four "chapels" facing the cardinal points were put together. This dagoba is being restored by the Buddhists. In shape it is a solid inverted bowl, with a small passage leading to the relic-chamber.

2. The *Abhayagiriya* (Mount of Safety), the largest dagoba of all, was begun by King Mahasena, 275-292 A.D., or 302 A.D. Its diameter is 327 ft., and its height when perfect was about 270 ft. It has now lost a great part of the pinnacle, and its present height is only about 260 ft. It stands on a grand paved platform, eight acres in extent, raised some feet above the surrounding enclosure. The enormous mass of bricks in this structure baffles conception. Sir Emerson Tennent calculates that they are sufficient to construct a town of the size of Ipswich or Coventry, or to build a wall 10 ft. high from

London to Edinburgh. The *ti* on the summit having shown symptoms of falling, it and what remained of the stump of the spire above it have been put into a thoroughly safe condition by the Ceylon Government, but the lower part remains untouched. It was erected in the 1st century B.C. The summit can now be easily reached, and commands a magnificent view.

3. The *Jetawanarama*, built in the 4th century A.D., was of about the same dimensions as the *Abhayagiriya*. It has been suggested, with some probability, that the names of these two dagobas have been transposed, possibly from the 12th century. The Buddhist Atamasthama Committee allowed a Buddhist monk to make "improvements" on the dagoba; after he had felled all the trees, the Archaeological Commissioners took over the ruin in 1910, to save it. Supposing that *Jetawanarama* is the ancient *Abhayagiriya*, its foundation is dated 88 B.C., and its enlargement 113-125 A.D.

4. The *Miriswetiya* was built by King Dutugemunu in the 2nd century B.C., and rebuilt in the reign of Kasyapa V. It is surrounded by monastery ruins on three sides. Though smaller than the *Jetawanarama*, it is remarkable for the unusually fine sculpture of its "chapels," or shrines, of the *Dhyani Buddhas*. It has been partly restored at the expense of the late King of Siam.

Among the minor dagobas, the *Thuparama* and *Lankarama* (both described by Mitton), the latter surrounded by three and the first by four circles of carved columns, are among the most remarkable and most elegant. These columns are a special feature of Ceylon dagobas.

The ruined *Dalada Maligawa*, or Temple of the Tooth, should not be overlooked. The tooth-relic, about 2 inches in length, and like a man's little finger in

thickness and shape, is said to have been brought to Ceylon by a Brahman princess, to have been removed for safety when Tamil raids occurred, and to have had many wanderings until it reached Kandy.

II. The remains of Monastic Buildings are to be found in every direction in the shape of raised stone platforms, foundations, and stone pillars. The walls themselves between the pillars, being of brick, have disappeared. One of the most remarkable of these remains consists of 1600 stone pillars about 12 ft. high and only a few feet distant from each other, arranged in forty parallel rows. These formed the lowest storey of the famous nine-storeyed "Brazen Palace," or monastery, erected by King Dutugemunu 161 B.C., or 101 B.C., nine storeys high (reduced to seven) as described in the *Mahawansa*. It may have been the nucleus of the *Mahavihara*, or Chief Monastery of the town; the upper storeys were no doubt of wood. The clusters of pillars and of platforms of pavilions in every direction for 10 m. are innumerable. Among the most remarkable is one called the Queen's Pavilion, the semicircular doorstep of which is carved with a double procession of animals and studies of flowers.

III. The *Pokunas* are bathing-tanks, or tanks for the supply of drinking water. They differ from irrigation tanks, in being wholly constructed of masonry or of cement. These, too, are countless, in number, and are to be found everywhere through the jungle. The finest is the double (*Kuttam*) tank in the outer circular road, into which elaborately-carved staircases descend.

But there is one object of interest in Anuradhapura which does not come under these heads, the sacred *Pipal* or *Bo-Tree* (*Ficus*

religiosa)—originally brought from Buddh Gaya (p. 58) — and though only a fragment now remains, probably the oldest historical tree existing. It was originally brought by the sister of Mahinda, the Princess Sanghamitta, as a branch of the bo-tree under which Buddha sat at Buddh Gaya, and planted about 240 B.C. (also dated 288 B.C.). From that time to this it has been watched over by an uninterrupted succession of guardians. It stands on a small terraced mound, and is surrounded by a number of descendants. The adjacent buildings are all modern, but the entrance to the enclosure possesses a fine semicircular doorstep or "moonstone."

Some fine bronze statues found at Anuradhapura in 1908 are now in the Colombo Museum.

Another object of interest not to be omitted is the **Rock Temple** at Isurumuniya, carved in the solid rock, with a large seated Buddha inside and sculptures in low relief on the terraces.

The large tanks of Nuwarawewa, Tissawewa, and Basawakulam, the two latter of which are filled from Kalawewa, have restored to the neighbourhood of Anuradhapura some of its former fertility.

Other objects of interest at Anuradhapura and in the neighbourhood are—the stone canoes, the Peacock Palace, a vihara W. of Ruanwelli, a *mahapali* or Alms Hall, the Selachaitiya dagoba, rock-dwellings (galgé, etc.), the so-called Elephant Stables (with the guard-stone), the King's Palace, the Kuttam (= twin) Pokuna, the Pan-kuliya monastery, Vijayarama, Yantragalas (square stones with holes), Elala's tomb, Vessagiriya monastery (a town in itself), groups of buildings on the Arippe Road, the Kiribat dagoba, the Mullegalla and Puliyanukulam monasteries.

8 m. E. of Anuradhapura is **Mihintale** (R.H.) a centre of Bud-

dhist pilgrimage. (A motor-coach from Anuradhapura to Trincomalee passes Mihintale, or a conveyance can be obtained at the Hotel). It is a rocky hill crowned with a large dagoba, and literally covered with the remains of temples and hermitages. Ancient and picturesque stairs of many hundred steps lead to the summit, whence there is a very fine view over the forest plain, from which the great dagobas of Anuradhapura stand up like the pyramids or natural hills. The centre of attraction at Mihintale is *Mahinda's Bed*, the undoubted cell occupied by Mahinda (son of the great King Asoka) the apostle of Buddhism in Ceylon, in the reign of King Dewanampiya Tissa, and containing the stone couch on which he lay. An idea prevails that the cell is difficult of access. This is not so. The view from the interior of the cell, in itself fine, is rendered more so by the position from which it is obtained between the rocks which overhang the "bed." Beside the cell is the Ambasthala dagoba, erected on the traditional spot where King Dewanampiya Tissa met the missionary Mahinda.

Mihintale has various other objects to be visited, such as the Alms Hall, the Half-way House, the open-air Lion Bath, the stone boat, Giribandha dagoba, Nagapokuna, Kaludiya Palace, the Elephant Calf Hill, and on the summit the Mahaseya dagoba.

From Anuradhapura, Colombo can be reached in 6 hours by the boat-train from Talaimannar.

Travellers for the North can either go direct by rail to Jaffna (p. 762, Route 7) and Kankesan-turai or by road as below. The road is uninteresting all the way to *Elephant Pass*. The stages are as follows:—

95 m. from Kandy (by direct road through Mihintale) **Medawachchiya** (R.H.) (see p. 761) *

From here a road leads N.W. to

(52 m.) **Mannar** (R.H.) (p. 762), passing the *Giant's Tank* and the magnificent masonry dam which diverts the *Aruvi Aru* to fill it. From Medawachchiya a railway, 65 m. long, runs parallel with the road to **Talaimannar** (see p. 762).

111 m. from Kandy. **Vavuniya** (R.H. *), a small town on the edge of a newly-restored tank.

120 m. **Irampaikkulam** (R.H.) now a P.W.D. Bungalow).

126 m. **Puliyankulam** (R.H.).

132 m. **Kanakarayankulam** (R.H., now an Irrigation Bungalow).

139 m. **Mankulam** (R.H., good). From here there is a good metalled road, 30 m., to **Mullaittivu**, on N.E. coast (motor-bus service). **Mullaittivu** is the headquarters of the District, under an Asst. Govt. Agent.

142 m. **Panikkankulam** (P.W.D. Bungalow).

154 m. **Iranaimadu** (Halting Bungalow). Here are large irrigation works.

The scrub gets lower and smaller, and the soil poorer and sandier, as the tedious straight road is followed to

166 m. **Elephant Pass** (R.H.), so named because here the herds of elephants were in the habit of coming from the mainland through the shallow water to the peninsula of Jaffna, which is now entered by a long causeway crossing the arm of the sea which all but divides the district of Jaffna from the remainder of Ceylon.

The R.H. is the old Dutch fort at the edge of the water—quaint, picturesque and always cool. Fishing season in the lagoon, Nov. to Jany.

174 m. **Pallai** (R.H., good). The region now attained is totally different from that between Anur-

adhapura and Elephant Pass. The peninsula of Jaffna is the home of a busy, industrious, and closely-packed population. Every cultivable acre is cultivated, and the garden-culture is of beautiful neatness. Great quantities of tobacco of a very coarse description are grown, a portion of which is exported to S. India. The fine road passes through a succession of large villages as it proceeds.

187 m. **Chavakachcheri** (R.H. good), a large village surrounded by groves of the palmyra palm, which in this province takes the place occupied by the coconut palm in the South.

201 m. **Jaffna** or **Jaffnapatam** (R.H.), a large and flourishing town of 42,436 inhabitants, see of a Roman Catholic bishop, and seat of the Government Agent of the Northern Province.

The old *Dutch Fort*, of considerable size, is in perfect preservation, and is a good specimen of a 17th century fortification. Within it are the *King's House* (the Governor's residence when he visits Jaffna), an old *Dutch Church* containing curious tombstones (one dated 1621), the residences of certain officials, and the prison. On the esplanade between the fort and the city stands a graceful *Clock Tower*, built in 1882. The Dutch expelled the Portuguese from Jaffna, their last station in Ceylon, in 1633. The following interesting excursions may be made from Jaffna :—

1. To the Mission Stations at Uduvil, Batticotta, and Kopay, where thousands of children are educated. American Mission Hospitals at Inuvil and Manippay. The motor-bus service to Kayts (see p. 770) passes through Manippay.

2. To Puttur, where is a very remarkable well of great depth, which is apparently inexhaustible, and ebbs and flows slightly daily.

3. To Point Pedro, the Northern-most port of Jaffna; motor-bus service, 21 m., via Valvettiturai.

There are some interesting Hindu temples at Jaffna and in its vicinity.

Jaffna is celebrated for its mangoes, esteemed by some as superior to the far-famed Bombay variety. Grapes are also grown. *Turtles* are caught, and *bêche-de-mer* or *trepang*, a species of sea slug, is fished for, and exported to China, where it is considered a great delicacy. *Chanks* (the shells of a mollusc) are also fished for and exported to India, where they are highly esteemed. In the little Island of Delft, W. of the Jaffna Peninsula, ponies used to be bred.

The Jaffna Peninsula roads are some of the best in the island. R.Hs. are sufficiently furnished; visitors should write to R.H. keepers.

Kankasanturai (R.H. ★) (11½ m. from Jaffna). The terminus of the Northern Railway and a port of call for the round-the-island steamers (see p. 737). A very pretty seaside village; sea-bathing. By coast road and ferry to the island of Kayts, where the Dutch fort is a miniature Château d'If. Motor-bus service, 18 m. from Jaffna. **Karaitivu** is reached by a 2-m. causeway with 10 bridges.

ROUTE 9.

KANDY to TRINCOMALEE (with excursion to Polonnaruwa).

Motor-omnibus service from Kandy to Trincomalee; from Matale, *via* Dambulla, to Habarane; and from Trincomalee to Anuradhapura. Rail from Habarane to Polonnaruwa *via* Galoya Jn.

Trincomalee can be most conveniently reached by rail from Colombo (184 m.) *via* Polgahawela

and Maho junction. For those who have motor-cars and prefer the road journey, Matale (p. 762, 113 m. from Trincomalee) is recommended as a starting-point. From Matale to **Dambulla** the route is the same as Route 8.

On crossing the bridge over the *Mirisgani Oya*, instead of turning left to Anuradhapura and Jaffna (Route 8), the road proceeds straight on, and passing on the right the road to Sigiriya (p. 763), continues chiefly through dense but poor forest, varied by one or two villages in the midst of small clearings, to (60 m. from Kandy) Habarane (R.H.).

Habarane (130 m. from Colombo) is a station on the railway from Maho Junction to Trincomalee. There is a picturesque *Buddhist Temple* of considerable antiquity to be seen here; the paintings are of better design and execution than are usually found in such places. From the lofty rock by the tank a remarkable view is obtained over the great sea of forest to the N. and E., out of which rises with startling abruptness the rock pillar of Sigiriya (see Route 8).

From Habarane an extremely interesting excursion may be made to **Polonnaruwa** (27 m., R.H.), one of the ancient and deserted capitals of Ceylon. In the Mahawansa Polonnaruwa is called Pulatthi or Pulastipura; its real name is Toparé, from the adjacent Topawewa (p. 771). Rail to Galoya Jn. (p. 772). There is no motor-bus service, but the road from Habarane to Polonnaruwa is passable for motor-cars. After passing for about 15 m. through wood so dense that it is seldom the eye can penetrate more than a few yards on either side of the path, **Minneriya** (p. 773) is reached. This magnificent tank, built by King Maha Sena in 275 A.D., was restored some years ago by the Ceylon Government.

The reservoir is upwards of 20 m. in circumference, and no point in its margin commands a view of its entire expanse. The scenery of this lake is enchanting, and nothing can exceed the beauty both in form and colour of the mountain ranges to the S. Half-way between Minneriya and Polonnaruwa is the small lake of **Giritale**, also a tank restored recently, and highly picturesque. The R.H. at **Polonnaruwa** is situated on a promontory jutting out into the great lake or tank of **Topawewa** (charge Rs.8.25 a day; rooms should be engaged beforehand). The view is very similar to that from Minneriya, and is of great beauty.

Polonnaruwa first became a royal residence in 368 A.D., when the lake of **Topawewa** was formed, but it did not take rank as the capital till the middle of the 8th century. The principal ruins, however, are of a later date, being chiefly of the time of **Parakrama Bahu**, 1164-1197 A.D., or 1153-1186 A.D., the epic hero and chief name at Polonnaruwa: the **Mahawansa** is full of his prowess. It is now wholly deserted, and the masses of ruin, which are strewn for miles around, have to be sought in the dense jungle. It seems to have been abandoned about the end of the 13th century. The ancient sites are all in the care of the Government. A detailed account (with plan) will be found in Mitton's *Lost Cities of Ceylon* (Chaps. XII-XVIII, Murray, 1928), upon which the following brief summary is largely based.¹

Close to the R.H. and to the E. of it are the **Audience Hall** and the **Council Chamber**; near the latter was discovered in 1820 the colossal stone lion, 6 ft. from the sole of the foot to the crown, which is now in the Colombo Museum (p.

739); it served as a support for the throne. To the E. again is the **Citadel**, some 25 acres in extent, containing a massive building which has been identified with the Royal Palace. Hard by is the beautiful **Elephant Pavilion**, which rises on three platforms; elephants are carved in the panels on the lowest stage, and lions and dwarfs on the other two.

About 1 m. S. of the R.H. is the colossal rock-cut figure, 11 ft. 6 ins. in height, commonly called the statue of **Parakrama Bahu I.** In the Ceylon Arch. Rep. for 1906 it is pronounced to be "unmistakably, a rock-hewn portrait of a revered religious teacher from the Indian Continent." A cast of it is to be seen in the Colombo Museum. Straight in front of the statue, and about 200 yards away, is the **Potgul Vihara**, or Library dagoba, a circular building with remarkably thick walls (nearly 15 ft. at the ground). There is a tradition that it once contained the sacred books; hence the name. To the W. of the R.H. lie the ruins of what appears to have been a strong tower, the probably wooden interior of which is wholly gone; and a little farther in the same direction are the royal pavilions and bathing-tank, ornamented by much elegant sculpture.

About 1 m. to the N. is a remarkable group of buildings—the popularly named **Dalada Maligawa**, or tooth-shrine, officially called **Siva Devalé**, No. 1. It is really a Hindu temple of about 1200 A.D., a fine granite building having much elegant ornament of quasi-Hindu design, where the tooth may have received temporary shelter; the **Thuparama**, a large, massive brick temple, of the 12th century, Hindu in design—containing images of Buddha—the front and Eastern roof have fallen, while the inner chamber preserves

¹ See also Fergusson's *Indian and Eastern Architecture*, I, 244-249.

its vault and a tower; the **Wata Dagé** (=circular relic-house), a curious circular edifice, 58 ft. in diameter, on a raised mound, with four carved staircases and a low stone terrace with an ornamental parapet, once 14 ft. high, of unique design; and to the N. of this the **Ata** (or **Hata**) **Dagé** (=house of eight relics), a large ruined temple. Lying to the E. of the **Ata Dagé** is the massive **Gal-pota**, or Stone Book, a slab weighing nearly 25 tons, in the shape of a palm-leaf book. In the same vicinity are the **Satmahal Prasada**, a tower of seven storeys of diminishing size; the **Nissanka-latamanda-paya**, called the Floral Altar, and sometimes, perhaps wrongly, regarded as a Buddhist "post and rail" enclosure (see p. xcvi); and a little farther to the N. the **Vishnu Dewale**, a very Hindu ornamental structure of design, in good preservation. Due N. from the **Satmahal Prasada** are also the **Pabulu Vihara**, the third largest at Polonnaruwa, and the **Siva Devali No. 2**.

1 m. farther N. is the **Rankot Dagoba**, called also the **Ruanwelle-saye**, the Place of Golden Dust, built in the 12th century. It is 200 ft. in height, with a diameter of 180 ft. The spire is very perfect, even the statues surrounding the drum being clearly discernible. Near it, but to the N., is the **Jetawanarama**, a mass of ruins, of which the principal ruin is called **Buddha-sima-prasada**; the "House of the Elder," a temple 170 ft. long, 70 ft. wide, and 70 ft. high, at the end of which is a statue of Buddha once nearly 45 ft. high, now headless. The **Kiri** (=milk-white) **dagoba** about 100 ft. high, the chunam coating of which is still very perfect, adjoins this building.

Another 1 m. of jungle has to be traversed to reach the **Gal** (=Kalugal, or the Black-rock) **Vihara**, a spot where are a rock-cut figure

of Buddha sitting, a colossal statue, 23 ft. high, of Ananda, Buddha's favourite disciple, in a pose of deep sorrow, and a reclining figure of the unconscious Buddha, 46 ft. long, cut out of the solid rock.

1 m. farther N. again is the **Demala Maha Seya**, containing an upright Buddha, once over 40 ft. high; a very large building, highly ornamented, of which the roof and upper part of the walls have fallen in. The debris was partially cleared away in 1886, when many interesting frescoes were found on the walls, but these have since to a great extent perished from exposure.

2 m. to the N. beyond this (4 m. from the R.H.) is the famous **Lotus Bath**, which is thus described in the Ceylon Arch. Survey Report for 1909:—"Imagine a gigantic lotus flower of granite, full blown, 24 ft. 9 in. in diameter, with five concentric lamina of eight petals, gradually diminishing to a stamen. Then decide to reverse nature's order, and instead of a convex shape, depress the petal rings into a concavity . . . and we have the granite bath as it exists in all its shapeliness to this day." Not very far to the S. is the **Unagala Vihara**, now a shapeless mass, but once the largest of the dagobas.

The dagobas of Polonnaruwa will not compare with those of Anuradhapura, but the buildings of the temples and other structures are in far better preservation. A huge red lotus grows in great profusion in the lake, probably the descendant of those cultivated for use in the temples and palaces of the city.

Varied sport can be obtained from Polonnaruwa under the Government Regulations: there is a close season for certain animals.

140 m. from Colombo, and 40 m. from Trincomalee, is **Galoya** station

(see p. 761); junction for a branch line (77 m.) to Batticaloa (p. 750). 7 m. from Galoya on this line is **Minneriya** (p. 770) and 14 m. farther on is **Polonnaruwa** (p. 771).

On the road to Trincomalee is (76 m. from Kandy)

Alutoya (P.W.D. Bungalow) in the midst of the thick forest; not a bad station for sportsmen. The country is flat, and the jungle of such uniform character as to become very monotonous. Monkeys are certain to be seen crossing the road in large troops during this portion of the journey.

159 m. **Kantalai** stn. (R.H.), on the bund of the great tank of Kantalai, restored by Sir W. Gregory in 1875.

170 m. **Tampalakamam** (Tamblegam). Minor road on right leads to paddy-fields irrigated by Kantalai.

In *Tampalakamam Bay*, the *window-pane oyster* (*Placuna placenta*) is found—so called from the use to which the Chinese sometimes put the flat translucent shells. The *Placuna* pearls, valueless as gems, are used by the wealthy classes in India to make lime to chew with “betel.”

184 m. by rail from Colombo, **Trincomalee** (R.H.) 65 m. from Anuradhapura, to which there are daily motor services (fare: Rs.6.60 per seat). A motor-bus service also on alternate days between Trincomalee and Batticaloa. A steamer plies between Colombo and Trincomalee. It is a town with a magnificent natural harbour, on the N.E. coast of the island. It is built on the N. side of the bay, on the neck of a bold peninsula, separating the inner from the outer harbour. The former is about 4 sq. m. in extent, with very deep water. The place

is well laid out, but the houses are poor. Population 9442.

The town was one of the earliest settlements of the Tamil race in Ceylon. They built a great temple on the spot where Fort Frederick now stands. The building was destroyed by the Portuguese when they took the place in 1622, and the materials were employed to build the fort; but the site is still held in great veneration, and every week a Brahman priest, in the presence of a large crowd, throws offerings into the sea from a ledge near the summit of a huge precipice of black rock—a most picturesque scene. A monument on the summit of the rocky eminence bears an inscription in Dutch, which purports to commemorate the death of a young Dutch lady, who, according to tradition, in 1687, being disappointed in a love affair, committed suicide at the spot. But the prosaic fact is that the lady long survived the erection of the monument (*Rept. on Dutch Records*, by R. G. Anthonisz, Govt. Archivist, p. 39). Since the expulsion of the Portuguese, European nations have held the place in the following order: Dutch, 1639 A.D.; French, 1673 A.D.; Dutch, 1674 A.D.; French, 1782 A.D.; Dutch, 1783 A.D.; English, 1795. It was taken by the British fleet after a siege of three weeks, and was formally ceded to Great Britain at the Peace of Amiens in 1802.

Trincomalee was for many years the headquarters of the East India Squadron and is being used as a naval oil-depot and a subsidiary base to Singapore. The entrance to the Bay is marked out by a fine Lighthouse at Foul Point, and another light is placed farther in on Round Island. The Mahaweli-ganga, the largest river in the Island, disembogues here.

About 6 m. out of the town, at a place called **Kanniya**, there are some hot springs.

Good shooting (principally snipe) is to be had in season in the neighbourhood of Trincomalee.

In *Koddiyar Bay*, S. of Trincomalee the ship *Anne* was wrecked in 1659, and Captain Knox, his son Robert and his crew were captured. A white stone at the foot of an old tree bears the inscription:—"This is the White Man's Tree under which Robert Knox was captured. A.D. 1659." (See p. 750.)

ROUTE 10.

Sporting Tours.

The attention of sportsmen is called to the work of the Game Preservation Society (headquarters Nuwara Eliya) whose main object is to enforce "the close seasons." The open season for game (including peafowl) is from 1st November to 31st May. Visitors who profit by the work of the Society are invited to contribute to its funds, the meagreness of which restricts its operations. See *Sporting Districts in the Times of Ceylon Green Book*. Mr H. Storey's *Hunting and Shooting in Ceylon* (Longmans, 1907) is, unfortunately, out of print; but there are some useful hints in *Tales from an Eastern Jungle*, by R. W. S. Mitchell (Cecil Palmer, 1928).

Such tours as the following, of course, require some degree of preparation. Though there are R.Hs. on the routes indicated, they are but few. They contain probably no furniture save a table and a bench or two, and are quite destitute of supplies. The traveller or sportsman will have to carry his own food, cooking utensils, bedding, and tent; and this will necessitate the employment of numerous porters, whose pace must regulate his own, though, if on horseback, he can get over the ground more rapidly than they do. If expense is not an object, it would be well to get temporary shelters of bamboo and leaf thatch put up at those places, where there is no R.H., for the tent is but an indifferent

protection against either fierce sun or heavy rain, and health may seriously suffer in consequence.

In the *Southern Province* all R.Hs. are well furnished and provided with beds and bed linen, crockery, cooking utensils, etc. Supplies, except fowl, eggs, rice, etc., are not usually found except in the principal R.Hs. Soda-water is usually available. Other Government buildings—e.g., Public Works Department Bungalows—usually contain only a table and two chairs. The stages are generally long, and for the sportsman particularly it is advisable to bring a tent, food, cooking utensils, etc. Bullock-carts can be hired at reasonable rates where there are roads.

1. The **Yala Sanctuary**. Of course it is not supposed to be likely that any sportsman would make the *whole* of this tour, but it indicates a line of country any part of which would make a good centre for sport. The animals to be found are elephants,¹ bears, leopards, deer, and in some places wild buffaloes; wild peacocks abound in the forests, and the tanks and marshes are full of wild fowl; they also swarm with crocodiles.

Starting from **Badulla** (R.H. *), by motor the road to **Bibile** (R.H.) is described in Route 2.

Here wheel conveyance must be abandoned, and the distance must be counted not by miles but in hours, the hour being calculated on the ordinary pace of a loaded porter.

6 hrs. **Nilgala** (Circuit bungalow). A small village with a little patch of paddy cultivation,

¹ A licence to shoot an elephant costs for residents Rs.100 and for non-residents Rs.300, a buffalo Rs.20 for residents and Rs.75 for non-residents, and a general game licence Rs.5 and Rs.45 for non-residents per annum.

situated most picturesquely on a river at the entrance to a wild and narrow pass.

4 hrs. **Dambagalla** (Circuit bungalow). A small village, in the vicinity of which irrigation works have been constructed in modern times.

3 hrs. **Medagama** (R.H.). In a very pretty jungle country abounding with elephants.

5 hrs. **Nakkala**. There is a picturesque Buddhist temple on the side of a mountain in the neighbourhood.

3 hrs. **Buttala** (R.H.* good). An oasis of cultivation in the jungle, due to the restoration of its ancient irrigation works. Everywhere through the forests the ruins of ancient systems of irrigation and other vestiges of civilisation are to be found. Excellent snipe-shooting during October to January.

4 hrs. **Galge**. A mass of bare rocks rising from the jungle. There is no R.H. here, and though some shelter may be obtained in caves, tents or a temporary house would be needed.

3 hrs. **Kataragama** (Circuit Bungalow). A famous place of Hindu pilgrimage, to which worshippers were wont to resort from all parts of India, as, indeed, they occasionally still do. The pilgrimage was found to produce such mischievous effects in the spread of disease that the Ceylon Government has for many years endeavoured to check it, and it is now reduced to comparatively small numbers. Still, at the time (the dates vary) of the annual pilgrimage, the temple and its vicinity form a picturesque and interesting sight. The temple itself is but an insignificant

building, and a single gilt-metal tile forms the only relic of the golden roof for which it was once celebrated.

6 hrs. **Palutupana** (see p. 758). In the Southern Province.

4 hrs. **Yala River** (primitive halt-ing bungalow). Here begins the District in which wild buffaloes are still found. On the farther bank of the Yala River a large tract of country has been "proclaimed" by Government, and is known as the "Yala Sanctuary," in which *no shooting or hunting of any sort* is allowed. The Sanctuary lies between the rivers Yala and Kumbukkan, the other limits being the sea on one side and the boundary of the Province on the other. The area is computed at 150 sq. miles. Good forest scenery on river.

3 hrs. **Uda Potana**. No R.H. About 2 hrs. from Uda Potana the ford crossing the Kumbukkan Aar, the boundary between the Southern and Eastern Provinces is reached, and about $\frac{1}{2}$ hr. farther is **Kumuna** (P.W. Bungalow), near a small village.

6 hrs. **Okanda** (P.W. Bungalow), at the foot of a bare rock rising out of the sea of jungle. Peacocks are to be found in great abundance in the neighbourhood of Okanda.

3 hrs. **Panawa** or Panama (P.W. Bungalow).

6 hrs. **Lahugalawewa** (Maha-wewa). A restored tank, the haunt of many wild-fowl. There is a P.W. Bungalow at the tank. Its accommodation is limited. Many elephants in the neighbourhood.

From this point an excursion of some days may be made through the wild country on the border of Uva and the Eastern Province.

There are hardly any villages, and the only accommodation, not specially provided for, would have to be found in the meagre hospitality of some secluded Buddhist monastery of which a few are scattered through the forests. It is useless to indicate any particular route, as that would certainly be made to depend upon the reports received as to the haunts of wild animals at the time.

It may, however, be assumed that a return to comparative civilisation will be made at Irrakamam, a restored tank, where there is an Irrigation Bungalow. In its vicinity are the scanty ruins of what was once an enormous dagoba, and a good road leads hence to **Kalmunai** (R.H. *) on the coast, and thence to (25 m.) **Batticaloa** (see Route 2). The sportsman, however, will probably prefer to proceed through the jungles to **Chadaiyantala** and **Amparai** tanks, both of which are swarming with crocodiles; and from the latter to

6 hrs. the river **Namal Aru** (Namal Oya), the boundary of the Eastern Province, on crossing which the traveller finds himself again in Uva.

5 hrs. riding along a good track will bring him back to **Nilgala**, from whence he may either return

to **Badulla** the way he came or by 6 hrs. **Medagama** (R.H.) and 4 hrs. **Alupota** (Circuit Bungalow), in a lovely position, rejoining the main road to **Badulla** at (2 hrs.) **Passara** (R.H.). (See Route 2.)

The foregoing tour, under the title of "The Park Country and the Batticaloa Tanks," is more fully described in *Sir Samuel Baker's Rifle and Hound in Ceylon*, 1854.

2. **The Horton Plains** (see Route 2). Here deer are hunted on foot and knifed; there is also excellent trout fishing in season. Full particulars may be obtained at *The Hill Club*, **Nuwara Eliya**, or from the Assistant Government Agent at that place.

3. **The Trincomalee District** (see Route 9).

4. **The Puttalam District** (see Route 6).

The Wil Pattu Sanctuary. This Sanctuary of 150 sq. m. was formed in 1903 on the lines of that of **Yala**.

5. **The Hambantota District** (see pp. 753, 758).

6. **Minneriya and Polonnaruwa** (Route 9).

INDEX AND DIRECTORY

(References to persons are given in small capital type ; and, where there are numerous page references to places, the page which contains the description of the place is given in *italics*.)

Mr MURRAY will feel greatly obliged to travellers who are kind enough to send him notes of any mistakes or omissions that they may notice in this Directory, giving at the same time a permanent address to refer to in case of necessity.

(R.) = Refreshment Room ; D.B. = Dak or Travellers' Bungalow ;
R.H. = Rest House ; H. = Hotel.

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399. *Springfield H.; Abbot H.*

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D.B. close to rly. sta. Good refreshment and waiting-rooms at rly. sta. Conveyances to Mt. Abu (17 m.): Mail motor-lorry (two dispatches daily in each direction), one 1st cl. seat, rs. 5; 8 2nd cl., rs. 2-8; 8 3rd cl., r. 1-12 (up journey, 1 3 hrs., down, 2 hrs.). An unreserved 1st cl. passenger daily (1 1/2 hrs.) runs twice daily, if three seats are booked; fare, rs. 5 a seat. Reserved car (between 6 A.M. and 7 P.M.), rs. 22, irrespective of seats occupied. Reserved lorries: red (one 1st, 8 2nd, 8 3rd cl. seats), rs. 40; green (one 1st, 16 2nd cl. seats), rs. 48. Luggage, 10 seers free (in car, 15 seers). Heavy baggage should be sent in bullock carts (full load, rs. 4-8; 8 mds. up, 10 mds. down). Bullock shigraws for four passengers rs. 4-8, or r. 1-2 per seat.

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Hotels: *Cecil H. (Mrs Hotz); Laurie's H.; Metropolitan H.*, all about 1 m. from Fort rly. sta., and about 1 1/2 m. from Cantonment rly. sta. Bdg. House; Gilmour House (Mrs Hand).

Bank : *Imperial Bank.*

Churches: *St George's, St Patrick's, Havelock Chapel*, Cantonment, *St Paul's*, Civil Lines, *St Mathias's*, Agra Fort, *R.C. Cathedral* in Civil Lines; *Methodist Episcopal*.

Club: *Agra C.*, near Post Office.

Missions: *C.M.S.*, St John's College, Baptist Mission, Methodist Mission.

Hospitals: *Thomason*, for men, includes Eye Hospital; *Dufferin*, includes Maternity and Lady Lyall

Hospitals; *Hewett*, Hospital for infectious diseases; *Medical School*.

Shops: *Shawl Merchants, Gold and Silver Embroidery, Ganeshi Lal & Sons*, Drummond Rd., *Gulab Chand & Lakshmi Chand*, Chuttan Lal, Kinari Bazar, also shops in Partabpura. *Marble: Agra Marble Works*, Drummond Road, *Bihari Lal & Sons*, *Bhola Nath & Sons*, both in Partabpura, *Kunji Lal & Sons*, *Arju Bunsu*, Kinari Bazar, *Johri Marble Works*, *Miniature Painter, Md. Jacob & Sons*, Partabpura; *Photographers, Priya Lal, Sadr Bazar*, Raina, *Munshi Ganeshi Lal & Sons*, Drummond Rd., *Ratan Lal & Sons*, Partabpura, *Dorabji & Sons*, Sadr Bazar; *Carpet Factory, East Indian Carpet Factory*, Belanganj, *Kailash Carpet Factory*, Drummond Rd.

Motors: *Pestonji*, Cantonment, *Nathu Mal Mahadeo*, Belanganj, *MacKensie*, *Chiranjilal*, *Verman Bros.*, Partabpura. Standard fare, as. 8 per mile. Cars are also provided by the Cecil Hotel and Laurie's Hotel, but at higher rates.

Hackney Carriages: *Landaus and Phaetons*, 1 hr., r. 1, subseq. hr., rs. 12,

half-day (5 hrs.), rs. 3, as. 8,
whole day (9 hrs.), rs. 6.
Tongas, as. 12 per hr., as. 8
subseq. hr.

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Shahibag (may be occupied
with Collector's permission).

Banks: *Imperial Bank
of India*, in the Bhadar;
Central Bank of India.

Churches: *Christ C.*,
close to the Grand H.; also
Church in the Cantonment,
2 m. outside the city.

Mission: *Irish Presby-
terian Mission*, R.C.
Church.

Hackney Carriages:

Class I.

1st hr. 1 r.
Each subs. hr. 9 as.
Day 6½ rs.
To city or camp 1 r.

Motors: as. 12 per m.
an. 1 for each 2 minutes of
detention.

**AHMADNAGAR (AHMED-
NAGAR)**, cvii, 536 (R.),
D.B. Good tongas available
at rly. sta., where there is a
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Club, good. **Golf Club**.

Bank: *Imperial Bank*.

Missions: *S.P.G. R.C.
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Bank: *Imperial Bank*.

Church: near the rly. sta.

Mission: *Medical of
U.F. Church of Scotland*.

Hackney Carriages:

By time—

	Class I.	II.
Day of 9 hrs.	5 rs.	3 rs.
Half-day	3 rs.	2 rs.
1 hr.	1½ rs.	12 as.

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Bank: *Imperial Bank*.

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Clubs: *Akyab Gymkhana
Club*, Race Course Road;
Volunteers' Club, and *Akyab
Club*, both in Main
Road.

Bank: *Imperial Bank*.

General Stores: *Jacob
& Co.*, *Ezekiel & Co.*, *U
Tha Zan & Co.*

European Shop: *Rowe
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Bank: *Imperial Bank*.

Missions: *American
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and C.M.S. Church*.

**Petrol Stores and Motor
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and to Calcutta, Route 2;
from Delhi and Agra, Route
21; to Benares, Route 2;
to Lucknow *via* Cawnpore,
Route 21.

Hotels: *Grand H., Alli-
ance H.*, both in Canning
Road.

Clubs: *Allahabad Club*,
Stanley Road; *Thornhill
Club*, Stanley Road; *United
Club*, Thornhill Road
(Anglo-Indian Assoc.).

Banks: *Imperial B.*,
Mayo Road; *Allahabad B.*,
Cawnpore Road.

**Booksellers and Sta-
tioners:** *A. H. Wheeler &
Co.*, Elgin Rd.; *B. N.
Rama & Co.*, Canning
Rd.; *Shapoorjee & Co.*,
Albert Rd.; *N. India Tract
and Book Soc.*, Clive Rd.;
Brit. and For. Bible Soc.,
Thornhill Rd.; *Ramdayal
Agarwala*, Katra.

Chemists: *Gray & Co.*,
B. N. Rama & Co., Can-
ning Road.

Drapers: *Trevillion &
Clark*, Canning Road.

General Merchants:
H. Parrott & Co., *Sha-
poorjee & Co.*, *Guzdar &
Co.*, Albert Road; *B. N.
Rama & Co.*, *Gandhi &
Co.*, Canning Road.

Jewellers: *Hanhart &
Co.*, and *Jewellers Ltd.*,
Canning Road.

Churches: Anglican:
All Saints' Cathedral,
Cannington; *Holy Trinity*,
Church Rd.; *St David's*,
Cantonment. R.C.: *St
Joseph's*, Thornhill Rd.
*Church of Scotland: St
Andrew's*, Elgin Rd. *Bap-
tist:* Elgin Rd.

Hospitals: *Civil*, Stanley
Rd.; *Cotwin*, City; *Eye*,
City.

Missions: *C.M.S.*, St
Paul's Church; *Divinity
College*; *The Baptist*,
Presbyterian, *American
Methodist Episcopal*, and
Zenana.

Motors: *Repairs: Moti-
shaw & United Motor and
Eng. Works*, Canning Rd.;
Gilbert & Sons, *Steel &
Co.*, and *Ramgopal Ganesk
Das*, Albert Rd. *Petrol:*
Gilbert & Sons, *Guzdar &
Co.*, *Chunilal Chandi Per-
shad*, R. G. Das, Albert
Rd.; *Motishaw*, P. L.
Jaitly & Co., Canning Rd.

Newspapers: *The
Pioneer* (daily); *The Pion-
eer Mail*, for readers
in Europe; *The Leader*
(daily).

Photographers: *M. B. Mistry*, Canning Rd.; *M. L. Vishwakarma*, Johnstonganj.

Tailors: *E. A. Cline & Co.*, Elgin Rd.; *Trevillion & Clark*, Canning Rd.; *Hope Bros.*, Club Road.

Hackney Carriages:

By time—

Class I. II.
1st hr. 1 r. 2 as. 14 as.
Subs. hr. 9 as. 7 as.
Day, 4 rs. 12 as. 3 rs. 12 as.

By distance—

(By agreement) 9 as. 7 as.
per m.

Special class:

1st hr. 1 r. 12 as.
Subs. hr. 14 as.

Motors on Hire: A few available at Guzdar's, Steel's, Gilbert's, United Motor and Eng-Works. By day, rs. 6 per hr.; by night, rs. 8 per hr. By distance outside Municipality, as. 12 per m.

Amusements: *Picture Palace*, Canning Road.; *The Coral*, South Rd.; *The Rink*, Cawnpore Rd.

ALLANMYO, 720.

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Bank: *Imperial Bank.*

ALMORA, D.B., 428.

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D.B. close to rly. sta. Application should be made beforehand to the Senior Member of Council for the use of a carriage (there is a fixed charge); also for permission to visit the Palace, Library, Treasury, and Armoury.

Mission: U.F. Ch. of Scotland.

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Hotels: *Parry's H.*, Staff Road. *Lumley's H.*, Lawrence Rd., near the rly. sta.; *Victoria H.*, Staff Road.

Agents: *R. Norton & Co.* undertake the clearing and forwarding of goods between Ambala, Kasauli, Sabathu, etc.

Club: *Sirkind C.*

Bank: *Imperial Bank.*

Mission: *American Presbyterian.*

Chemist: *Hazara Singh.*

General Merchants, *Norton;* *Mohan Lal;* *Hormusji.*

Tailors: *Coutts;* *Masihulla.*

Hackney Carriages:

Class I. II.

Per day . 4 rs. 3 rs.
1st hr. . 1 r. 12 as.
subs. hr. . 8 as. 6 as.

AMBALANGODA, R.H., 755; good bathing-place.

AMBALANTOTA, R.H., 758.

AMBARNATH, 521.

AMBASAMUDRAM, 679.

AMBEPUSSA, 741, R.H., $\frac{1}{2}$ m. from rly. sta.

AMBER, lxxiv, 224, 228.

AMDA, 144.

AMGAON, 142.

AMHERST, LORD, cii, 333.

AMHERST (Burma), 726.

AMINGAON, 497.

AMIR KHUSRU, POET, 313, 315.

A M M A Y A N A Y A K. KANUR (Kodaikanal Rd.), R., 672.

D.B. close to rly. sta., convenient for travellers to and from Kodaikanal.

AMRAOTI, 137.

Waiting Rooms. D.B.

Bank: *Imperial Bank.*

AMRITSAR (R.), 343.

Hotels: *Cambridge H.*, Queen's Road; *Amritsar H.*, The Mall.

Amritsar can be conveniently visited from Lahore (24 m. by road).

Club: *Amritsar C.*

Banks: *Imperial Bank;* *National Bank of India;* *Chartered Bank of India, Australia, and China;* *Allahabad Bank;* *Punjab and Sind Bank.*

Carpet Factories: *Devi Sahai Chamba Mal;* *Joseph Wittmann;* *T. C. Mailer;* *K. B. Ghulam Sadik.*

Dealers in Oriental Goods: *Devi Sahai Chamba Mal;* *Bokhara House (Din Gul, Proprietor); Radha Kishen;* *Lachman Das;* *Karm Chand;* *Tajuddin.*

AMTA, 130, 135.

ANAGUNDI, 585.

ANAKAPALLI, 518.

ANAND, 199.

ANANTAPUR, 591.

ANAWRATA, KING, 687, 706, 719, 723.

ANDHER, 171.

ANDHERI, 31.

ANHILWARA, 208, 210.

ANJEDIVA, 556, 654.

ANJENGO, 680.

ANKLESWAR, 195.

ANSON, GENERAL, cxxxii, cxxxiii, 292.

ANURADHAPURA (R.),

lxxxiv, xcvi, 673, 736, 741, 758, 760, 761, 762, 764-768, 769, 770, 772.

Hotel: *Anuradhapura.*

English Church.

The rates and fares for carriages, hackeries, spring-carts and jinrickshas are chargeable according to a scale fixed by the Ceylon Govt.

APPA SAHIB, OF NAGPUR, 138; **OF SATARA**, 547, 549.

ARAVALLI HILLS, 211.

ARCHITECTURE, lxxxvii-ci.

ARCOOT, 610.

ARKONAM (R.), 542, 613, 627, 638, 655.

Sleeping accommodation at rly. sta.

ARORE, 405.

ARRAH, D.B., 61.

ARSIKERE (R.), 595, 597, 607.

ART IN INDIA, cv-cxi.

ASAF JAH, NIZAM, 44, 75, 560.

ASAF KHAN, 207, 263, 279, 308.

ASANSOL (R., D.B.), 55, 66, 145, 502.

Bank: *Imperial Bank.*

ASIATIC SOCIETY, II, 115.

ASIRGARH HILL-FORT, 44.

ASKA, 516.

ASOKA, EMPEROR, lxxxi, lxxxix, xcvi, cv, 35, 48, 51, 58, 65, 69, 90, 100, 102, 115, 153, 165, 166, 168, 240, 242, 244, 302, 309, 383, 399, 431, 474, 510.

ASOKA'S PILLARS (LATS), lxxxi, lxxxix, 51, 90, 100, 102, 113, 308, 309, 474.

ASOKA'S ROCK INSCRIPTIONS, lxxxi, 35, 48, 51, 55, 56, 58, 115, 242, 309, 383, 399, 510.

ASSAM VALLEY, 495-501.

Mail Communication with Calcutta by Santahar and Gauhati, 496.

ASSAYE, lxx, 16, 86.

ATGAON, 35, 38.

ATTINGAL, 679.

ATTOCK, R.H., 381.

AUCKLAND, LORD, 109, 110, 332, 353.

AUNGIER, GERALD, 3, 11, 194.

AURANGABAD, D.B., 83.

Motors for Ellora (13 m.) at rly. sta.

AURANGZEB, EMPEROR (AL-AMGIR), lvi, lxxi, lxxiv, ci, 37, 75, 76, 83, 84, 85, 96, 98, 100, 105, 153, 163, 185, 190, 193, 215, 224, 247, 254, 257, 260, 264, 267, 271, 284, 298, 301, 303, 308, 313, 320, 340, 350, 355, 362, 366, 384, 402, 408, 435, 493, 536, 539, 540, 548, 550, 560, 561, 565, 571, 577, 578, 589, 606.

AVA, 687, 713.

AVANTIPUR, 395.

AVISAWELLA, R.H., 752.

AWATKOOLA, 393.

AZAMGARH, 475.

AZAM, PRINCE, 75, 105, 190, 224, 493.

AZIMGANJ, 471.

B

BABAR, EMPEROR, lv, lvi, c, 180, 186, 219, 254, 260, 279, 281, 327, 384, 425.

BADAMI, xcix, 580-583.

Rly. R.H. Permission to occupy granted by Mamlatdar. Motors available.

BADARPUR (Assam), 495, 501.

BADARPUR (Delhi), 322.

BADLI-KI-SARAI, cxxxiii, 292, 308, 327.

BADNERA (R.), Waiting Room, D.B., 137.

BADULLA, R.H. 749, 774.

Bank: Bank of Uva.

BAGALKOT, 580.

BAGH, CAVES OF, 150.

BAGDEHI, 143.

BAHADUR SHAH (TWO EMPERORS), 190, 290, 312, 320.

BAHADUR SHAH OF GUJARAT, 149, 153, 155.

BAHA WALPUR, D.B., lvi, 404.

BAHMANI DYNASTY, lv, 536, 538, 558.

BAHRAICH, 429.

BAHURIBAND, 48.

BAIDYANATH, 55.

BAIDYANATHDHAM (Deogarh), 66.

BAILLIE GUARD, 450, 452, 457.

BAIZA BAI OF INDORE, 96, 98, 292.

BAJAURA, 335, 336.

BAJI RAO I., lxx, 99, 173.

BAJI RAO II., lxx, 37, 99, 439, 526, 531, 533, 534.

BALAJI BAJI RAO, lxx, 42, 534.

BALANGODA, R.H., 754.

BALASORE, D.B., 130, 503.

BALBAN, EMPEROR, 319, 403, 480.

BALHARSHAH, 138, 570, 614.

BALIPITHAM, 604.

BALLYGUNGE, 117.

BALRAMPUR, 429.

BALSAR, 192.

BALTAL, 397.

BALUGAN, 515.

BANAVAR, 595.

BANDA (R.), D.B., 179.

BANDARAWELA, 749, 754.

Hotel: *Bandarawela Grand*.

BANDEL, 67, 133.

BANDIKUI (R.), 229, 254.

BANDRA, 31, 191.

BANGALORE, 592, 598-601.

(R. at City Sta. Tea and Coffee Room at Cantonment Sta.). Railway from Bombay and Poona, Routes 26 and 31; from Madras Route 32 (b), from Secunderabad, 590.

Hotels: *Cubbon H.; West End H.* (High Ground); *Lavender's H.*; *Central H.* (St Mark's Square).

Missions: *London; Wesleyan Methodist; Methodist Episcopal; R.C. Cathedral; Zenana.*

Banks: *Imperial Bank, St Mark's Square; Mysore Bank; Bangalore Bank.*

Chemists: *J. B. Foster & Co., South Parade.*

Dental Surgeon: *Dr Ingram Cotton*, 38 Trinity Road.

Outfitters: *Whiteaway Laidlaw, Wrenn Bennett, South Parade.*

Jewellers: *Barton & Son, South Parade; M. R. Venkataram Chetty.*

Motors: *Addison & Co., The Ford Depot, G. H. Booley & Co., Mackenzie & Co., F. T. Peters & Co., 109 Brigade Rd.; R. Patel & Co., 11 St Mark's Road; R. Salunkay, Fort Gate, City.*

Bookseller: *Higginbotham*, 17A South Parade.

Photographers: *Barton & Son; K. V. Iyengar, Brigade Road.*

Clubs: *United Service C., Residency Road; Century C., Cubbon Park; Bangalore C., Lal Bagh Rd.*

Hackney Carriages:

By time—

	Class I.	II.
1st hr.	1 r. 4 as.	1 r. 4 as.
Each subs. hr.	8 as.	5 as.

By distance—

	Class I.	II.
3 m.	1 r. 4 as.	1 r.
Each subs. m.	6 as.	5 as.

BANGANAPALLE, 590.

BANIHAL, route to Kashmir, 371, 394, 399.

BANKI (Orissa), 504.

BANKIPORE (R.), 62.

D.B. near rly. sta.

Banks: *Imperial Bank of India; Allahabad Bank.*

Churches: *Christ Church and St Joseph's.*

BANNU, 371, 384.

BANYAN TREES (Ficus indica), 51, 57, 60, 85, 127, 196, 552, 617, 677.

BARA, D.B., 385.

BARABANKI, 429.

BARABAR CAVES, lxxxix, 56.

BARAHABHUM, 145.

BARAKAO, D.B., 377.

BARAKAR, 60.

BARAMGALLA, D.B., 398.

BARAMULA, D.B., 392.

BARAN, 171.

BARAUNI, 473.

BAREHTA, 190.

BAREILLY, D.B., 425.

R. Rooms at the rly. sta. with sleeping-rooms.

Hotels: Coronation; Civil and Military; Cantonment D.B.

Club: Bareilly C.

Banks: Imperial Bank of India, Allahabad Bank.

BARETH, 171.

BARGAON, 48.

BARKAKANA, 56, 145.

BARNARD, GENERAL SIR H., cxxxiii, 292, 293, 308.

BARODA, 197, 252.

Refreshment and Waiting Rooms.

D.B. in camp. 1½ m. from rly. sta.

Hotel: Baroda Hotel: ½ m. to W. of railway station: well situated.

Churches: Anglican, consecrated by Bp. Heber, 1824; restored 1838; R.C. and Methodist.

BARRACKPORE, 128, 477.

BARSANA, 262.

BARWA - SAGAR, D.B., 173, 176.

BASSEIN (Bombay), 2, 3, 6, 34.

BASSEIN ROAD, 34, 191.

Waiting Room at rly. station.

District Bungalow (not furnished for travellers, and no messman) near ruins. Conveyances at the station.

BASSEIN (Burma), 722, 729.

Bank: Imperial Bank.

BATTICALOA, R.H. 750, 759, 761, 773, 776.

BATTULU OYA, 759.

BATWA, 207.

BAWAN, 396.

BAYANA (BIANA), 254, 282.

BEAWAR, D.B., 220.

BEDSA CAVES, xcvi, 525.

BEGAMPET, 558, 568.

BEGAMPUR (Delhi), 289, 312.

BEGAMPUR (Lahore), 366.

BELGAUM (R.), 551.

D.B. near the Fort, 1½ m. from sta. Hotel near sta.

Missions: Methodist Episcopal; R.C. Church.

Public Conveyances: drawn by bullocks, and a few motor-cars.

BELIHULOYA, 754.

BELLARY (R.), D.B., 588.

Railway Refreshment Room.

Bank: Imperial Bank.

London Missionary Society.

BELLS, Rangoon—699; Mingun—713; Moulmein, 724.

BELPAHAR, 143.

BELUR (Calcutta), 130.

BELUR (Mysore), R.H., 595, 597.

Motor-bus service from Hassan.

BENARES, D.B., 87-100.

Railway from Bombay and Calcutta, Route 2; from Lucknow, Route 20; from Allahabad, Route 2.

Hotels: Clark's H.; H. de Paris. Terms on application.

Banks: Imperial Bank of India; Allahabad B.; Benares B.

Churches: St Mary's, Cantonment: R.C. Church.

Missions: C.M.S. (at Siga), London Mission, Wesleyan, Baptist, Zenana, R.C.

Hackney Carriages: available at the rly. sta. and hotels. *Phaetons*—1 r. 8 as. for 1st hr., 12 as. for each subsequent hr. To Sarnath and back, 5 rs. There are a few good carriages in the Cantonment.

Motors: From Messrs B. P. Halder and Messrs Md. Ikram Khan, Cant. Winter rates: 1st class, rs. 8 per hour; 2nd class, rs. 8 1st hr., and rs. 4 subsequent hr.

Industries: Indian Textile Co., Jagmohan Das, Girdhar Das, B. D. Gupta. For Indian cloth, *Puran Chand Harnarain*, near Golden Temple; for brassware, *Baij Nath Balma-kund*, Thathari Bazar.

BENARES, MAHARAJAS OF, 88, 89, 91, 93, 97, 100.

BENGAL COAL, 66, 145.

BENTINCK, LORD WM., 110, 175, 341, 615, 642, 643.

BENTOTA, R.H., 755.

BERAR, 136.

BERARLI, 399.

BERHAMPORE (Bengal), D.B., cxxxii, 477.

BERHAMPUR (Ganjam), 516.

Bank: Imperial Bank.

BERNIER F., 259, 300, 304, 394, 425.

BESNAGAR, xcii, 170, 171.

BET, 251.

BETTIAH, D.B., 474.

BETUL, 45.

BEYPURE, 649.

BEZWADA (R.), D.B., 513, 570, 591.

Bank: Imperial Bank.

BHABUA, 55.

BHADRACHALAM, 570.

BHADRAK, 503.

BHAGALPUR, D.B., 472.

Bank: Imperial Bank.

BHAGWANPUR (Shahabad), 55.

BHAJA CAVES, xcvi, 523, 525.

BHAMO, 704, 715-716.

No hotels or R.H. Visitors should remain on the steamer.

Express steamboats from Mandalay every Friday, due at Bhamo Sunday. Return from Bhamo every Monday. Ferry-boats also run daily to and from Katha in connection with the rly.

BHANDARA ROAD, D.B., 140.

BHANDUP, 35, 37.

BHANGIR, 569.

BHARATPUR (R.), 254.

D.B. outside the Muttra Gate.

BHARHUT Stupa, lxxxiii, lxxxix, xcvi, 48, 113.

BHATINDA, 232, 351.

BHATKAL, 654.

BHAUNAGAR (Bhavnagar), 237, 238. D.B.

BHILSA, 171.

BHIMBAR, D.B., 391, 397.

BHIM TAL, 427.

BHITA, 52.

BHIWANI, R.H., 353.
BHOJEEPURA, 426.
BHOJPUR, 171.
BHOPAL (R.), lvi, 163, 164.
 D.B. near rly. sta.
 Bank: *Imperial Bank*.
BHOR GHAT, 36, 521.
BHUBANESWAR, lxxxi, xciii, xcix, 505-510.
BHUJ, 233.
BHUSAWAL (R.), 43, 136.
BHUTIA BASTI, 487.
BIBILE, R.H., 750, 774.
BIDAR, C., 557.
 Motor-bus from Hyderabad.
BIDERRA, 133.
BIJAPUR (R.), iv, c, 571-580.
 D.B., with arrangements for food, in the town. Tongas are to be had at the rly. sta.; fare to D.B., as 8.
BIJNOR, D.B., 424.
BIKANER, D.B., 218, 219, 404.
BIKANER, SIR GANGA SINGH, MAHARAJA OF, 218.
BIKRAMPUR (C.P.), 46.
BILAHRI, 48.
BILASPUR (R.), 142.
BILESWAR (Kathiawar), 249.
BIMLIPATAM, 518.
BINA (R.), 171.
BINDUSARA, 65.
BIRBAL, RAJA, 175, 284.
BIR SINGH DEO, 173, 176, 180.
BIRUR, 594.
BITHUR, 439, 445.
BITRAGUNTA, 520.
BLACK HOLE (Calcutta), 105, 123.
BLACK PAGODA, xcix, 514.
BOBBILI, 517.
BODINAYAKKANUR, 673.
BOLAN PASS, 416.
BOLARUM, 568.
BOMBAY, xix, 1-28; see Special Index, p. 1.
Railways: To Calcutta by G.I.P. and E.I. Rlys. Routes 2; by G.I.P. and B. N. Rlys., Route 7; to Poona, Madras, and Bangalore, by G.I.P. and Madras Rlys., Routes 26 and 32; to Hyderabad, via Poona and Wadi, Route 28; to Ahmadabad by B.B. and

C.I. Rly., Route 10; to Allahabad, Route 2; to Agra, Routes 9 and 12; to Delhi, Routes 10 and 12.

Bed-, dressing-, bath-rooms at the new Victoria Terminus stn. (main line) of the G.I.P.R.

Hotels: *Taj Mahal Palace H.* near the Apollo Bunder; *H. Majestic*, Wodehouse Road, near Apollo Bunder; *Grand H.*, Ballard Estate; *Apollo H.*, corner of Colaba Causeway, near Apollo Bunder.

Restaurants: *Victoria Station Restaurant*; *Majestic*; *Green's* (near Yacht Club and Taj Mahal Hotel); *Cornaglia*, late *Pelitti* (confectioner), 83 Meadows St.; *Mongini*, Churchgate St. The best restaurants are the Grill of the Taj Mahal and Green's.

Agents: *Thos. Cook & Son*, Hornby Road and Taj Mahal Hotel; *Grindlay & Co.*, Nicol Road; *Cox & King*, Hornby Road; *American Express Co.*, 240 Hornby Road. These firms undertake all business in connection with travelling and financial arrangements, forwarding of goods, engaging of Indian servants, etc.

Thos. Cook & Son, Hornby Road, are agents for rly. tickets, provide circular tickets, for tours in India, supply all kinds of information about excursions (e.g. to Elephanta and Kanheri).

Bands: On certain days of the week at the *Yacht Club*, the *Gymkhana* and *Willington Clubs*, the *Hanging Gardens* (Malabar Hill), and the *Victoria Gardens*, Byculla.

Bankers: *Imperial Bank of India*, Bank Street, Elphinstone Circle; *Chartered Bank of India*, Esplanade Road; *Hong-Kong and Shanghai Bank*, 49 Church Gate Street; *National Bank of India*, Esplanade Road; *Mercantile Bank of India*, 54 Esplanade Road; *Comptoir National d'Escompte*, 74 Bruce St., Fort; *P. & O. Banking Corporation*, 56 Esplanade Road; *Allahabad Bank*, Apollo St.

Eastern Bank, Churchgate St.; *International Banking Corp.*, 12 Churchgate St.

Baths: Salt-water *Swimming Baths* on Back Bay, and at Breach Candy.

Booksellers: *Thacker & Co., Ltd.*, Esplanade Road; *Taraporewalla & Co.*, Hornby Road; *Ramchandra Govind & Son*, Carnac Road.

Chemists: *Thompson & Taylor*, Esplanade Road; *Kemp & Co.*, Hornby Road and Cumballa Hill, *Phillips & Co.*, Esplanade Road.

Churches: *Anglican: St Thomas's Cath.*, Churchgate St.; *All Saints*, Malabar Hill; *St Peter's*, Mazagon; *Christ Church*, Byculla. *S.P.G. Church*, Ratnipura Road. *Church of Scotland: St Andrew's*, corner of Apollo St.; *United F.C. Waudby Road*. *R.C.: Cathedral*, Wodehouse Rd., *N.S. da Esparanza*, Kalbadavi; *N.S. da Gloria*, Mazagon.

Clubs: *Byculla Club*, Bellasis Road, Byculla, with sleeping accommodation attached (for men only).

Bombay Club, 26 Esplanade (for men only—a particularly good tiffin is served to members and guests).

Royal Bombay Yacht Club, on the Apollo Bunder, overlooking the bay. Subscriptions for Strangers admitted as members, rs. 16 a month. Ladies are admitted when accompanied by a member or hon. member.

Willington Sports Club, Clerk Road, Mahalakshmi. *Western India Turf Club*, Club Road, Byculla.

Bombay Hunt, Kennels at Santa Cruz.

The Bombay Gymkhana and Golf Club, Waudby Road; *Commercial Gymkhana*, Wodehouse Road; *Japanese Gymkhana*, Back Bay.

Ladies' Gymkhana, The Ridge, Malabar Hill, with lawn-tennis and badminton grounds.

The two best Clubs from a social point of view are the Royal Yacht Club

(where the band plays on Tuesday and Friday evenings) and the Willingdon Sports Club, where there is golf; also tennis, badminton, etc.

Consuls: *France*, Cuffe Parade, Colaba.

Italy, Asian Building, Ballard Estate.

U.S.A., Jehangir Wadia Building, Ballard Estate.

There are representatives of most other nations, including Belgium, Denmark, Holland, Japan, Norway, Persia, Portugal, Spain, Sweden and Switzerland.

Conveyances: There are plenty of victorias in the streets to be hired by the trip or for the hour at very moderate fixed fares—only as.8 inside the Fort limits.

Taxis: Within Town and Island of Bombay, first mile, as.8; each subsequent $\frac{1}{4}$ m., as.2; halts, as.2 for every 4 minutes.

Motors: For morning, rs.15, for afternoon, rs.20, for afternoon and evening, rs.20; for day of 12 hrs., rs.60.

Dentists: *Daly & Moore*, C3 Datoobhoy Mansion, Mayo Road; *D. H. Davison*, Lansdowne Road, Apollo Bunder.

General Stores: *Army and Navy Stores*, *Pyrkes Provision Stores*, both on the Esplanade.

Hairdressers: *Fucile*, under Bombay Club; for ladies, *Maison Sheppard*, Apollo Bunder.

Hospitals: See Special Index, p. 1.

House Agent: *E. W. Flower*, Dalal Street.

Jewellers: *Jewellers Ltd.* (Bechtlers), Churchgate Street.

Libraries: *Asiatic Society Library* in the Town Hall; the *Sassoon Institute*, Esplanade (visitors can join the lending library for a week).

Markets: *Crawford*, for fruit, vegetables, flowers, poultry, meat, etc. *Nal Bazaar*, in Sandhurst Road. *Cloth*, in Indian Quarter, Shaikh Memon Street.

Copper, close to Mombadevi Tank, Indian Quarter.

Medical Men. The European Hospital is St George's Hospital with its highly-qualified resident staff.

Milliners, Dressmakers, etc., *Evans Fraser & Co.*, and *Whiteaway, Laidlaw & Co.*, in Hornby Road, and *The Army and Navy Stores* and *Madam Rose* in Esplanade Road.

Missions, etc., see p. 23.

Motor Firms: *Ford's Automobiles (India) Ltd.*, Ford Buildings, Hughes Road; *Asian Motor Car Co.*, Sandhurst Road; *Automobile Co.*, 5 Queen's Road.

Newspapers: There is one leading English paper in Bombay, the *Times of India*, besides a number of Indian papers. Evening papers: *Evening News of India*, *Indian Daily Mail*. The *Times of India Illustrated Weekly* is noted for its admirable reproductions of Indian scenery.

Nurses: The "All Saints" Sisters: see p. 27.

Opticians: *Lawrence & Mayo*; Hornby Road; *D. M. Dastoor & Co.*, Esplanade Road.

Outfitters: *Asquith & Co.*; *Whiteaway Laidlaw; Hoar & Co.*, *Army and Navy Stores*—all in Esplanade Road.

Photographers: *Vandye Studios*, Esplanade Road; *Clifton & Co.*, *Vernon*, Hornby Road; *Mitchell*, Rampart Row.

Stables: *The Arab*, in Byculla; see p. 21.

Steamship Agencies: *P. & O. S.S. Co.*, Mackinnon, Mackenzie & Co., Ballard Road. Steamers every week to Aden, Ismailia, Port Said, Brindisi, Marseilles, Gibraltar, Plymouth, and London; and every fortnight to Colombo, Madras, Calcutta, Straits Settlements, China, Japan, and Australia.

British India S.N. Co., Mackinnon, Mackenzie & Co., for Calcutta, and coast ports, Karachi, Persian Gulf, Burma, and E. Coast of Africa.

Hall and Ellerman's City Lines, Killick Nixon & Co., Home Street.

Messageries Maritimes, Albert Buildings, Hornby Road.

Lloyd Triestino N. Co., Nicol Road, Ballard Estate.

Anchor Line (to Liverpool), *Grahams Trading Co.*, *Grahams Buildings*, Fort.

Bombay Steam Navigation Co. (Shepherd & Co.), Killick, Nixon & Co., 120 Frere Road—for neighbourhood of Bombay, Ratnagiri, Goa, Mangalore.

Nippon Yusen Kaisha, to China and Japan, Alice Building, Hornby Road.

Theatres: *The Excelsior*, *Empire* just off Hornby Road, and the *Opera House* near Sandhurst Road Bridge, and many Cinematograph Theatres.

Tramways run from end to end of Bombay, and extend from *Colaba* and the *Fort* to *Grant Road*, to *Parel*, *Dador*, *Byculla*, and to the *Docks*.

Visitors will probably prefer the excellent **Motor-omnibus** service which now covers the residential and business quarters of the city.

Wine Merchants: *The Army and Navy Stores*, *Phipson & Co.*, in Esplanade Road.

BORIVLI, 32, 191.

BOSTAN (R.), 418, 419.

BOTAD, 235.

BOUGHTON, DR G., 132, 313, 503.

BOURQUIEN, L., 290, 336.

BOWRINGPET, 607.

See Kolar Gold Fields.

BRAGANZA, CATHERINE OF, 2, 756

BRAHMAN CAVES, 29-31, 32, 81-82, 580-582, 635-638.

BRAHMAPUTRA RIVER, 492, 496, 497.

BRINDABAN, 263.

BROACH, 195.

D.B. in town. Waiting Room at sta.

Bank: *Imperial Bank*.

BROADFOOT, MAJOR G., 354, 624.

BUDDH (Bodh) GAYA, 56, 114, 768.

BUDDHA (Sakyamuni, Gautama or Gaudama in Burma), lxxvii, xcvi, 57, 58, 69, 70, 71, 72, 73, 77, 78, 79, 85,

88, 100, 103, 114, 151, 357, 376, 384, 408, 429, 430, 431, 463, 475, 489, 507, 519, 698, 701, 705, 711, 712, 713, 717, 718, 719, 724, 725, 726, 766, 771.

BUDDHIST CAVES, 32, 41-42, 56, 68-73, 77-79, 85, 150, 239, 505-507, 519-520, 523-526, 725, 726, 763.

BUDDHIST TEMPLES, 58, 135, 717-719, 744, 767.

BUDDHIST TOPES, see Stupas.

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BUKKUR ISLAND (R.), D.B., 411.

BUNDELKHAND, 173.

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BURDWAN (R.), D.B., 67.

BURGESS, DR J., 31, 68, and *passim*.

BURHANPUR, D.B., 44, 268.

BURN, COL. W., 290, 305.

BUSSY, MARQUIS DE, 655, 656.

BUTLER, SIR H., 691, 732.

BUTLER, SIR M., 138.

BUTTALA, R.H., 775.

BUXAR (R.), 61, 449, 633.

D.B. near Fort.

C

CABRAL, PEDRO ALVARES, 647.

CACHAR, 495.

CAIRO, xxxix, *xlii*, liii.

CALCUTTA, xix, 104-135.

See Special Index, p. 104.

For further information consult Thacker's Calcutta Directory.

Railways: From Bombay by Allahabad, Route 2, and by Nagpur, Route 7; from Madras, Route 25; from Darjeeling, Route 24; from Dacca, Route 24; from Lucknow and Benares, Route 21.

Hotels: *Grand Hotel*, Chowringhi Road, and *Great Eastern H.*, Old Court House St., are the only hotels approaching European standards. Others are *Spence's H.*, Wellesley Place, *Continental H.*, Chowringhi Road, where prices are more moderate. Terms include usual meals (without liquor). Reduction for a prolonged stay, though not always between Nov. and

March. Ordinary rates do not apply to Christmas week, when rooms are difficult to obtain and prices are increased.

Boarding Houses are often preferred to hotels, especially for a lengthened stay in Calcutta. In the cold weather season, especially at Christmas time, charges are increased and accommodation must be secured weeks beforehand.

Mrs King's, 1 and 2 Little Russell Street, and 48 Theatre Road; *Mrs Lord (Lord's Ltd.)*, 233 Lower Circular Road; *Mrs M'Donnell*, 1 Bishop Le-froy Road.

Restaurant and Confectioners: *Firpo*, 18/2 Chowringhi; *Pelitti*, 11 Govt. Place; *Gt. Eastern H.*; *Grand Café* attached to *Grand Hotel*, entrance Corporation Place; *Trocadero*, 10-11 Esplanade East; *Bristol Grill*, Lyon's Range; *Empire Restaurant*, Hindustan Insurance Buildings, Hogg Street; *Hotel Continental*, 12 Chowringhi.

Bankers and Agents: *Grindlay & Co.*, 6 Church Lane.

T. Cook & Son, Ltd., 4 Dalhousie Sq. East, supply all kinds of information about excursions and tours in India, and provide circular tickets, etc.

Cox & King, Wallace House, 5 Bankshall Street, shipping passage, agency and banking business; undertake all business in connection with travelling and financial arrangements for travellers in India.

American Express Co., 14 Government Place, East.

Banks: *Imperial Bank of India*, 3 Strand; *Ch. Bank of India, Australia, and China*, 5 Clive St.; *Merc. Bank of India, Ltd.*, 8 Clive St.; *Hong-Kong and Shanghai Banking Corpor.*, 31 Dalhousie Sq.; *National Bk. of India*, 104 Clive St.; *Allahabad Bk.*, 6 Royal Exchange Place; *Lloyd's Bank*, Cox's Branch, 101/1 Clive St.; *International Banking Corporation*, 4 Clive St.; *P. & O. Banking Cor-*

poration, 1 Fairlie Place; *Yokohama Specie Bank*, 1 Clive St.; *Eastern Bank*, 9 Clive St.

Bath: An excellent *Swimming Bath* on the Esplanade, admission through members.

Booksellers and Stationers: *Thacker, Spink, & Co.*, Esplanade East; *W. Newman & Co.*, Old Court House St.; *Butterworth & Co.*, 6 Hastings St. (books only).

Bootmakers: *Saddlers*: *Watts & Co.*, 15/16 Chowringhi; *Cuthbertson & Harper*, 10 Govt. Place; *Morrison & Cottle*, 8 Esplanade East.

Chemists: *R. Scott Thomson & Co.*, 15 Chowringhi Road; *Frank Ross & Co.*, 16 Chowringhi and 81 Park Street; *Bath-gate & Co.*, 17 Old Court House St. and 1/1 Camac St.; *Smith Stanistreet*, 5 Dalhousie Sq. East and 41 Theatre Rd.; *A. Chandler*, 7 Park St.

Churches: (ANGLICAN) — *St Paul's Cathedral*; *St John's Church*, formerly the Cathedral; *The Old Church*, Mission Row (C.M.S.); *St Peter's*, in the Fort; *St Thomas's* (the Free School Church).

(CHURCH OF SCOTLAND) — *St Andrew's*, Dalhousie Sq.; *U.F. Church of Scotland*, Wellesley Sq.

OTHERS: *Wesleyan Church*, Sudder St.; *Baptist Chapels*, Bow Bazar and Circular Road; *Congregational Union Chapel*, Dharmtolla and Hastings; *American Meth. Episcopal*, Dharmtolla; *R.C.*, *St Thomas*, Middleton Row; *Cathedral*, Portuguese Church Street, Dharmtolla Road.

Clubs: *Bengal Club*, 33 Chowringhi Road. Members of this Club may use the *Madras*, *Byculla*, *Hong-Kong*, and *Shanghai Clubs*, and vice versa. *United Service Club*, 31 Chowringhi; *Calcutta Club* (Europeans and Indians), 241 Lower Circular Rd.; *New Club*, 38 Chowringhi; *Saturday Club*, 7 Wood St.; *R. Calcutta Turf*

Club, 11 Russell St.; *R. Calcutta Golf Club*; *Tollygunge* (country) *Club*; *Jodhpore* (country) *Club*.

Consuls: *U.S.A.*, 9 Esplanade Mansions.

France, 2 Auckland Place.

Germany, 2 Store Road, Ballygunge.

Italy, 23 Harrington Mansions.

All leading countries are represented at Calcutta by Consuls.

Conveyances: Motors can be hired from the Indian Motor Taxi-Cab Co., 33 Rowland Road, Ballyganj. Taxi-cabs ply for hire at rates of as.8 per m. 1st class, and as.2 for every subsequent sixth of a mile: detention, as.2 for every 4 minutes. Cabs (commonly called *ticca gharries*) are less plentiful; charges are:

Class I. II.

1st hr. . . 1 r. 8 as. 1 r.

Subs. hr. . . 12 as. 8 as.

Half-day . . 4 rs. 2 rs. 8 as.

Day . . . 7 rs. 4 rs. 8 as.

Dentists: *J. Edgar Gill*, 39 Chowringhi Road; *Smith Bros.*, 9 Chowringhi Rd.; *Metropolitan Dental Co.*, 2 Corporation Street.

Drapers: *Francis, Harrison, Hathaway & Co.*, Government Place; *Whiteaway Laidlaw*, Chowringhi; *Hall & Anderson*, Chowringhi; *Army and Navy Stores*, Chowringhi; *Mitchell*, Park Street.

Freemasons' Lodges: Dt. Grand Secy., Freemasons' Hall, 19 Park Street.

Hairdressers: *Youd & Co.*, Old Court House St.; *Bromley*, Chowringhi; *Tapitska*, Park Street.

Jewellers, Silversmiths, and Watchmakers: *Hamilton & Co.*, Old Court House St.; *Cooke & Kelvey*, Old Court House St.; *Boseck & Co.*, Chowringhi; *James Murray & Co.*, Government Place, E.; *Garrard & Co.*, 2 Dalhousie Square.

Livery Stables: *Cook & Co.*, Park Street; *Hart Bros.*, Ballygunge.

Lady Doctors: *Dr Mary Remfry*, *Dr Alice Headwards*, 33 Theatre Road.

Medical Men: Indian Medical Service Officers; *Dr Houseman*, 212 Harington Street.

Missions: *Oxford Mission*, 42 Cornwallis Street. *S.P.G.*, 224 Lower Circular Road.

The *Clewer Sisters*, working since 1881, have charge of the Canning Home for Nurses, European Girls' Orphanage, and Pratt Memorial School.

C.M.S., 10 Mission Row. *Church of Scotland*, Cornwallis Square.

U.F. Church of Scotland, 2 Cornwallis Square.

Baptist Mission Society, 42 Lower Circular Road.

The *Addl. Clergy Soc.*; the *Methodist Episcopal Mission*; the *L.M.S.*; the *Wesleyan Mission*; the *Zenana Mission* have all hdqrs. in Calcutta.

Motor-car Dealers and Repairers: Consult *Automobile Association of Bengal*, 87A Park St.

Indian Booksellers: *S. K. Lahiri & Co.*, 56 College Street; *Cambray & Co.*, 9 Hastings St.

Newspapers: *Statesman*, 6 Chowringhi; *Englishman*, 9 Hare St.; *Capital*, 1 Commercial Buildings; *Commerce*, 6 Mission Row; *New Empire* (Evening), 9 Dhurumtollah St. The leading Indian papers in English are—*The Bengali*, *Forward*, *Amrita Bazar Patrika*.

Nurses: *Lady Minto's Nursing Assocn.*, 4 Hungerford St.; *Calcutta Hospital Nurses Assocn.*, Secy. A. R. Nicholson, Allahabad Bank Building.

Opticians: *Lawrence & Mayo*; *Walter Bushnell*, Old Court House St.; *James Murray & Co.*, Govt. Place.

Outfitters: *Porter Stimson & Co.*; *Ranken & Co.*, Old Court House Street; *Whiteaway, Laidlaw & Co.*, Chowringhi; *Army & Navy Stores*, Chowringhi and Middleton Street; *Francis Harrison Hathaway*, 13 Government Place; *Hall & Anderson*, 31 Chowringhi; *Mitchell*, Park St.

Photographers: *Johnston & Hoffmann*, 22 Chowringhi Road; *Bourne & Shepherd*, 9 Chowringhi Road.

Photographic Apparatus: *Smith Stanistreet & Co.*, 5 Dalhousie Square, East; *Bathgate & Co.*, 17 Old Court House Street; *A. & N. Stores*, Chowringhi.

Societies: *Asiatic Society of Bengal*, 1 Park Street, founded by Sir William Jones; *Calcutta Historical Society*, Room 57, 3 Govt. Place, West.

Steamship Agencies (General).

Mackinnon, Mackenzie & Co., 16 Strand Rd., Agents *P. & O.* and *British India S.N. Companies*.

Ellerman's Hall & City Lines of S.S., Gladstone, *Wyllie & Co.*, 5 Council House St.

Clan Line Steamers, *Jas. Finlay, & Co.*, 1 Clive St.

Messageries Maritimes, Stephen House, Dalhousie Square.

Anchor Line, Grahams Trading Co., 9 Clive St.

Steamship Agencies (Local): *River S.N. Co.*, *Macneill & Co.*, 2 Fairlie Place.

Orissa Carrying Company's Steamers, *Macneill & Co.*, plying between Calcutta and Chandbally.

Calcutta S.N. Co., *Hoare, Miller & Co.*, 5 Fairlie Place.

Tailors: *Ranken & Co.*, 4 Old Court House St.; *W. H. Phelps & Co.*, 15 do. do.; *Harman & Co.*, 12 Govt. Place, E.; *William Heath*, Park House, Park Street; *Harnack & Co.*, Old Court House Street; *A. & N. Stores*, Chowringhi. See **Outfitters**.

Theatres: *The Empire Theatre*, Corporation Place (off Chowringhi); *The Globe Theatre*, Lindsay Street; *Elphinstone Picture Palace*, Chowringhi Place; *Madan Theatre*, Corporation St.; *Picture House*, Chowringhi; *Albion*, Corporation St. **Indian Theatres:** *Corin*

thian, Dhurumtollah ;
Star, Cornwallis St. ;
Russa, Bhowanipore ; *Al-*
fred, Harrison Road.

CALICUT, 649.

Hotel: *Mr P. Canaren's*
Empress H., near the
Beach. **D.B.**

Steamship Agents:
Andrew & Co.; *B.I.S.N.*
Co.

Bank: *Imperial Bank.*

CALIMERE, POINT, 661.

CAMBAY, 199.

CAMBOYS, 34, 553, 650.

CAMPBELL, SIR COLIN, LORD
CLYDE, CXXXV, CXXXVI, 110,
372, 443, 455-457, 458, 461,
464, 465, 467.

CAMPBELLPUR, 381.

CANNANORE, D.B., 652.

Hotel: *Esplanade.*

CANNING, LADY, 124, 129, 444,
487, 641, 645.

CANNING, LORD, cii, CXXXIII,
CXXXV, CXXXVI, 49, 110, 112,
138, 444, 459.

CAPE COMORIN, 678.

2nd class **D.B.**, and Travan-
core State Guest-House.

CARMICHAEL, LORD, 108, 111.

CARMICHAEL, SERGEANT, 296.

CARNAC, GEN. J., 11, 526, 653.

CARNAC, SIR J. R., 12.

CARNATIC, NAWABS OF THE,
610, 611, 613, 616, 617, 633,
668.

CASTE, lviii.

CASTLE ROCK (R.), 552.

CAUTLEY, SIR P., 111, 338.

CAUVERY FALLS, D.B., 602.
Jhatkas and motor-buses
available from Maddur Rly.
Stn., 30 m.

CAVES, BUDDHIST, 32, 41-42,
56, 68-73, 77-79, 85, 150, 239,
505-507, 519-520, 523-526,
646, 647, 683.

— **BRAHMAN**, 29-31, 32, 81-
82, 580-582, 635-638.

— **JAIN**, 82, 83, 187-189, 505,
507, 580, 582.

CANNPORE (R.), CXXXIV,
CXXXV, 176, 181, 438-440.

Railways: From Delhi
and Agra and to Allahabad,
Route 21. From Lucknow,
Route 21. From Itarsi,
Route 9.

Hotels: *Civil and Mili-*
tary; *Berkeley*; *Empress*
(Cantonment).

Club: *Cawnpore C.*,
Mall.

Banks: *Imperial, Alla-*
habad, National Bank of
India, Chartered Bank,
Tata's.

Hackney Carriages:

By distance: Special, as.8
per mile, 1st class, as.7,
2nd class, as.6. **By time**:
Special, 1st hr., rs.1-12;
subs. hr., as.14; whole day
of 9 hrs, rs.8; 1st class, 1st
hr., rs.1-8, subs. hr. as.12;
whole day, rs.7; 2nd class,
1st hr., rs.1-4, subs. hr.
as.10, whole day rs.6.

Tongas: Special, as.6
per mile, or 1st hr. as.12,
subs. hr. as.8, whole day
rs.5; ordinary, as.5 per
mile, or 1st hr. as.10, subs.
hr. as.6, whole day rs.4.

Garages: *Cawnpore*
Motor Co.; *Moona Lal*
& Sons; *G. Mackenzie*
& Co.

Missions: the *S.P.G.*
(Mission House, Christ
Church) have charge of
Christ Church School,
Generalganj School, and a
Girls' Boarding School.

The *Ladies' Association*
(*S.P.G.*) have six schools
and work in the Zenanas.
Woman's Union Mis-
sionary Society of America.
Methodist Epis. Mission.
R.C. Church.

CEYLON, xxi, 733-776.

CHAITASA, 144.

CHAINPUR (Shahabad
Dt.), 55.

CHAIT SINGH, RAJA, 54, 88, 91,
93, 100.

CHAKDARRA FORT, 383.

CHAKRADHARPUR, 144.

CHAKRATA, D.B., 423.

CHALISGAON, 43.

CHALUKYA KINGS, lxvi, xcv,
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CHAMAN, 418.

CHAMBA, D.B., 348.

CHAMBERLAIN, GEN. SIR C.,
402.

CHAMBERLAIN, GEN. SIR N.,
CXXXIII, 293, 385.

CHAMPA, 143.

CHAMPANER, 199, 252.

CHAMUNDI, 106.

CHANAK, 128.

CHANDA, D.B., 137, 140.

CHANDAUSI (R.), 425, 435.

Bank: *Allahabad Bank.*
CHANDERI, 172.

CHANDERNAGORE, 67, 105,
131, 658.

Hotels: *H. de Paris*;
Thistle H.; *Carlton H.*;
Riviera H.; *Prince of*
Wales H.

CHANDIL, 144.

CHANDNI (for Asirgarh),
44.

CHANDOD, 197.

CHANDOR, 42.

CHANDPUR, D.B., 405.

Bank: *Imperial Bank.*

CHANDRAGIRI (Madras),
xcix, 542, 614.

CHANDRAGIRI HILL
(Mysore), 598.

CHANDRAGUPTA, 65, 196, 598.

CHAPPAR RIFT, 419.

CHAPRA, D.B., 474.

Bank: *Imperial Bank.*

CHARLES II., KING, 2, 756.

CHARNOCK, JOB, 105, 124, 128,
478.

CHATRAPUR, D.B., 516.

CHATTISGARH, 142, 143.

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CHAUMUKH, 398.

CHAVAKACHCHERI,
R.H., 769.

CHAYA, 249.

CHELMSFORD, LADY AND
LORD, CXXIX, 325, 459.

CHENGAS SARAI, D.B.,
397.

CHENARI, D.B., 392.

CHENKALADI, 750.

CHENNARAYAPAT-
NAM, 597.

CHERAT, D.B., 383.

CHERRAPUNJI, 499.

D.B. commodious, with
servants.

CHHINDWARA, 141.

CHICACOLE, 516.

CHIDAMBARAM, xcvi, 660.

D.B. 1½ m. from rly. sta.

CHIKALDA, 137.

CHIK JAJUR, 594.

CHILAW, R.H., 759.

CHILIANWALA, 372.

CHILKA LAKE, 515.

CHINDWIN, 730-732.

CHINGLEPUT (R.), **D.B.**, 633,
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CHINHAT, 451, 461, 468.

CHINSURA, D.B., 133.

CHISHTI SAINTS, 222, 282,
284, 285, 312, 339, 400, 470,
494, 539.

CHITALDRUG, D.B., 594.
CHITORGARH, lxxiii,
xcviii, 155-159, 254, 275.

D.B. $\frac{1}{2}$ m. from rly. sta.,
belonging to Udaipur State.

For permission to see the
fort, application must be
made, by letter, to the local
Magistrate (Hakim). A
tonga can be obtained from
him for the drive up to the
Fort.

CHITRAKOT, 179.

CHITTAGONG, D.B., 495.

Club: Chittagong C.

Banks: Imperial Bank of
India, National Bank of
India.

Missions: Baptist, R.C.
Church.

CHITTAPUR, 557.

CHITTOOR, 542.

CHOLA KINGS, lxvi, xciv, 665.

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CHRISTIANITY IN INDIA,
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CLIVE, LORD, 3, 105, 118, 119,
122, 124, 127, 128, 133, 135,
477, 479, 540, 610, 611-613,
616, 618, 619, 668; **SECOND**
LORD, 612, 615.

CLOSE, SIR BARRY, 601, 619.

COAL, 45, 46, 66, 135, 141, 143,
145, 500, 570.

COCANADA (R.H.), 518.

Bank: Imperial Bank.

COCHIN, 646-648.

D.B. Club.

Church: Eng. Church;
R.C. Cathedral.

Bank: Imperial Bank.

Steamers: B.I.S.N. Co.

COIMBATORE, D.B., xcvi,
640.

Bank: Imperial Bank.

COLABA, 6, 8, 14.

COLOMBO, 737-740.

Hotels: Grand Oriental
H. (usually known as the
G.O.H.); Bristol H., York
St.; Hotel Metropole,
Queen St.

Galle Face H., quieter
and in a pleasant situation
than the G.O.H., close to
the sea, $\frac{1}{2}$ m. from the land-
ing-place. Swimming-bath
attached.

The Grand H. at Mount
Lavinia, 7 m. distant
by rail from Colombo,
is much frequented by
visitors. It is delightfully
situated on a promontory
overlooking the sea. Ex-
cellent fish tiffins on
Sundays. Sea bathing.

Agents: H. W. Cave &
Co., Queen St., for Cox &
King; Thos. Cook & Son,
Lloyds Building, Princes
St.; George Stewart & Co.,
14 Queen St., for Coutts &
Co.; Grindlay & Co., c/o
Chartered Bank; American
Express Co., 1 Queen
St.

Banks: National Bank
of India; Imperial Bank
of India; Hong-Kong and
Shanghai B.; Chartered
Bank of India, Australia,
and China; Mercantile
Bank of India; P. & O.
Banking Corp.; Eastern B.

Chemists: Colombo Apo-
thecaries' Co.; Cargills;
Miller & Co.

Churches: Anglican:
Christ Church Cathedral,
Mutwal; S. Peter's, The
Fort; Christ Church
(C.M.S.); Trinity Church,
Maradana; S. Michael's,
Polwatte; St Paul's Mila-
griya in Byzantine style;
and others. R.C.: St
Lucia (Cathedral), St
Philip Neri (in Norris
Rd. opp. Fort rly. sta.)
and others. Church of
Scotland: St Andrew's,
near the Galle Face Hotel.
Nonconformist; Wesleyan,
Colpetty, Maradana, and
Pettah; Baptist, Cinnamon
Gardens; Dutch Church,
Wolfendahl; and others.

European Clubs: the
Colombo C. on the Galle
Face. Golf C., 3 m. from
The Fort. Garden Club,
Victoria Park. Prince's
Club, Reid Avenue, Cinnamon
Gardens, E.

Consuls: in the Fort for
America, Belgium, Bolivia,
Chile, Denmark, France,
Italy, Japan, Mexico,
Netherlands, Norway,
Persia, Portugal, Siam
and Sweden.

Dentists and Doctors:
at the Bristol and Grand
Oriental Hotels.

Booksellers, Stationers,
etc. H. W. Cave & Co.,

Queen St., and the Colombo
Apothecaries' Co.

General Outfitters:
Cargills (also at Kandy
and Nuwara Eliya); White-
away, Laidlaw & Co.;
Miller & Co.; Smith,
Campbell & Co. (all three
also at Kandy).

General Stores: Car-
gills, (also Kandy and Nu-
wara Eliya); Miller & Co.
(also Kandy and Nuwara
Eliya); Whiteaway, Laid-
law & Co. (also at Kandy
and Nuwara Eliya); Col-
ombo Apothecaries' Co.,
Ltd. (also Kandy).

Motors: Walker, Sons &
Co. Ltd.; Brown & Co.
Ltd.; Eastern Garage;
Lover Bros. and others.

Motor-bus Services:
apply for list to Walker,
Sons & Co., Ltd.

Long-distance services
start from the stand in
Gas Works Street, Pettah.
Buses to Mount Lavinia
start from Lotus Road.

Motors: Taxi-cab fares:
within Municipality, 62
cents per mile.

Hired cars: — Town-
running, 5-seater, rs. 10 per
hr. To Mount Lavinia
(7 $\frac{1}{2}$ m.) and back, 4-seater,
rs. 20 for 2 hrs. To Mount
Lavinia and round Pettah
and Cinnamon Gardens, 5-
seater, rs. 30 for 3 hrs. See
Information for Visitors
leaflet, issued by Colombo
Municipality.

Rickshaws: 15 cents for
10 minutes; 35 cents for
30 minutes.

Hospitals: General Civil
Hospital, with wards for
Europeans, Regent St.;
Eye Hospital, Ward Place.

Ivories, Tortoiseshell
Jewellery, Moonstones,
etc.: N. W. H. Abdul
Caffoor, Main St.; O. L.
M. Macan Marikar, at the
G.O.H.

Missions: S.P.G., St
Thomas's College; Mount
Lavinia; C.M.S., Galle
Face, Christ Church; St
Luke's, and several schools.

E. Grinstead Sisters,
Schools and Orphanage (at
Polwatte).

Photographers: Platté
Ltd., Colpetty; Colonial
Photographic Studio, York
St.; H. W. Cave & Co.

Post Office in Queen Street; **Telegraph Office** in Lower Chatham Street, each 5-min. walk from landing jetty.

Railway and Coaching Rates and Carriage and Rickshaw Fares: see *The Pocket Time and Fare Table*, 10 cents; published by Government.

Steamship Agencies:

The P. & O. and B.I. Companies; office is in the Victoria Arcade, opposite the G.O.H. Agents, Mackinnon, Mackenzie & Co.

Messageries Maritimes, 5 Prince's Street.

Orient Agent, Whittall & Co.

Bibby Line. Agents, Carson & Co.

Ellerman's Hall and City Lines. Agents, Aitken, Spence & Co.

Anchor Line. Agents, Delmege, Forsyth & Co.

Clan Line. Agents, Jas. Finlay & Co.

COLVIN, J. R., 110, 268, 274.

COMBERMERE, GENL. LORD, 254, 255, 339.

COMILLA, 495.

CONJEEVERAM, xcvi, civ, 627-633.

R.H. here, and waiting-room at station. Conjeeveram can be visited from Chingleput or Arkonam. (Route 34).

Bank: *Imperial Bank* (sub-agency).

CONNAUGHT, DUKE OF, 161, 183, 325.

CONTAL, 502.

COOCH BEHAR, 497.

COONOR (R.), 641.

Hotels: *Glenview H.; Hill Grove H.*

Boarding Houses: *Belmont; Hampton; Hanson Lodge; Clavelly; Fairway; Bakeleigh.*

Club: *Coonor.*

Chemists: *Spencer & Co.; Coonor Pharmacy; Imperial Pharmacy.*

Pasteur Institute.

COORG, 607.

COOTE, SIR EYRE, 477, 542, 613, 616, 634, 655, 657, 659.

CORNWALLIS, MARQUIS, 11, 119, 474, 600, 604, 616, 618, 623.

CORYAT, T., 195, 220.

COSSIPORE, 129.

COTTON, SIR A., 518, 671.

COTTON, SIR H., 111, 497.

COTTON, BRIG.-GENL. S., 385.

COX'S BAZAR, 495.

CUBBON, GENL. MARK, 600.

CUDDALORE, D.B., 659.

Steamship Agents:

B.I.S.N. Co., Parry & Co.

Bank: *Imperial Bank.*

CUDDAPAH, D.B., 541.

Bank: *Imperial Bank.*

CUMBUM, 591.

CUNNINGHAM, GENL. SIR A., cii, 51, 101, 171, 178, 180, 184, 187, 321, 340, 357, 372, 375, 420.

CURZON, LORD, cii, ciii, 51, 58, 62, 90, 99, 109, 117, 120, 123, 125, 221, 239, 271, 300, 302, 362, 363, 365, 477.

CUTCH, 232.

CUTTACK (R.), D.B., 504.

Bank: *Imperial Bank.*

Club: within the Fort enclosure.

Missions: *Orissa Baptist, R.C. Church.*

D

DABHOI, 197.

DABO, 407.

DABOK, 159.

DACCA, 493.

D.B. near rly. sta.

Club: *Dacca C.*

Bank: *Imperial Bank.*

Hackney Carriages: 1st class—first hr., r.1; subsequent hrs., as.8.

Motors: At the *XL Garage* in Nawabpur Rd.

Missions: *Baptist; R.C. Cathedral.*

DAGOBAS; see *Stupas.*

DAGSHAI, 332.

DAKOR, 199.

DALHA HILL, 143.

DALHOUSIE, 348.

Hotels: *Stiffle's Grandview H.; Arranmoor H.*

Between Pathankot and Dalhousie it may be convenient to sleep at the D.B. at Dunera. But this is not necessary, as the journey by motor-car from Pathankot can be made in 4 hrs.

DALHOUSIE, MARQUIS OF, 118, 177, 605, 690.

DAL LAKE, 394, 396.

DALMA HILL, 144.

DALTONGANJ, 56, 145.

DAMAN ROAD, 191.

D.B. beyond town at mouth of river.

DAMBULLA, R.H., 763.

DAMODAR RIVER, 60, 134.

DAMOH, 172.

DANIEL, THOMAS, 95, 119, 120, 450, 677.

DANURBU, 689, 723.

DARBHANGA, D.B., 94, 123, 473.

Bank: *Imperial Bank.*

DAREKASA, 142.

DARJEELING, D.B., 485.

Hotels: *Mount Everest H., with fine views; Rockville H.; Central H.; Bellevue H.; Park H.; Elgin H.; Garrett's H.*

Boarding Houses: *Ada Villa; Beechwood; Alice Villa; The Labyrinth; Kenilworth.*

Clubs: *Darjeeling C., Auckland Road; Gymkhana C. near St Andrew's Church; and Chowrasta C.*

Bank: *Imperial Bank of India.*

Chemists: *Smith, Stanistreet & Co.; Frank Ross.*

Outfitters: *Whiteaway, Laidlaw & Co.; Francis Harrison, Hathaway & Co.; Hall & Anderson; Mitchell & Co.; Jetmu & Bhojraj.*

Churches: *St Andrew's, Anglican; St Columba's, Scotch; Union Chapel; Anglican and R.C. Chaplains at Jalapahar and Lebong Cantonments; Anglican Chapels at St Paul's and Diocesan Schools; R.C. Chapel, St Joseph's School, North Point, and Church in Loretto Convent.*

Masonic Lodge: *Mount Everest, 2439, E.C.; Lebong.*

DATIA, 173, 179.

DAULATABAD, D.B., 74.

Station for Ellora; see Ellora in Index.

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DE BOIGNE, BENOIT, 217, 265, 435.

DEDUR, 399.

DEESA, D.B., 210.

DEGANA, 219.

DEHRA DUN, D.B., 422.
Railhead for Mussoorie.
By motor-car to Bhatta
(11 m.) and remaining 3 m.
by dandy, rickshaw or pony;
see p. 422.

Hotels: *Royal H.*;
Gresham H.

Club: *Dehra Dun C.*

Banks: *Imperial Bank*;
Allahabad B.; *Bhagwan*
Das & Co.

DEHRI, 55.

DELHI, NEW, 322-326.

DELHI (R.), xcvi, xcvi, c, ci,
cii, cxiii, cxxxiv, 287-326.

Hotels: *Maidens H.*,
Alipur Road, in the Civil
Lines; *Cecil H.*, in the Civil
Lines, near Ludlow Castle
(open Oct. to April only);
Swiss H. (formerly Curzon
House), adjoining Delhi
Club.

Railways: From Bom-
bay, Routes 10 and 12; to
Lahore, Route 15; to Agra,
Cawnpore, Lucknow, and
Allahabad, Route 21.

Clubs: *Delhi C.*, in Lud-
low Castle; *Imperial Gym-*
khana, Kingsway; *Chelms-*
ford C., New Delhi.

Banks: *Imperial Bank*
of India (also in Rainsa);
Mercantile B.; *Chartered*
B.; *National Bank of*
India; *Lloyd's Bank*;
Allahabad Bank; and
others.

Agents: *Thos. Cook &*
Son, 4 Kashmir Gate;
Grindlay & Co.

Motor-cars on hire at
Maidens H. and at several
motor firms within the
Kashmir and Mori Gates.
Taxi-cab stands at Rly.
Station and opposite the
Delhi Club. *Taxi-cab*
fares: as. 12 a mile,
within limits of City, Civil
Lines, Imperial Delhi area
and New Cantonment.
Outside these limits, pas-
sengers must make their
own arrangements. *Tonga*
fares: as. 12, 1st hr.;
subs. hrs., as. 6. Higher
rates outside City and Civil
Lines.

Newspapers: *Hindustan*
Times; *Eastern Mail*.

Churches: *St James's*;
St Stephen's, of Cambridge
Mission; *R.C. Church*.

Missions: *S.P.G.* and
Cambridge Mission;
Baptist Mission; *Baptist*
Zenana Mission; *Metho-*
dist Mission.

Merchants: *Imre*
Schwaiger's Art Museum,
opposite Maidens H. Many
well-known shops in the
Chandni Chauk of jewellers
and sellers of embroideries
and all kinds of ornamented
ware. The "Ivory Palace"
(*Fakir Chand, Raghunath*
Das) opposite N. gate of
Jami Masjid. European
shops, and some dealers in
Oriental rugs, etc., on
Lothian Road within the
Kashmir Gate.

DE MONTMORENCY, SIR G., 356.

DEOGARH FORT, 172.

12 m. from Jakhlaun stn.

DEOGIRI, 74, 75; see Dau-
latabad.

DEOLALI, 39.

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DHANBAID, 60.

Bank: *Imperial Bank*.

DHANUSHKODI, 680.

Indian terminus of direct
rly. route to Ceylon and
Colombo, 760-762.

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DHARMAVARAM, 592.

DHARMKOT, 349.

DHARMPUR, D.B., 332.

DHARMSALA, D.B., 349.

Hotel: *Switzer's H.*

DHARUR, 510.

DHARWAR (R.), 593.

D.B. 1½ m. from station.

Kanarese Evang. Miss.

DHAULI ROCK, 510.

DHOLA (R.), 235.

For conveyance to Vala,

address the Vala State.

DHOLPUR (R.), D.B., 190.

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DHULIA, D.B., 43.

Bank: *Imperial Bank*.

DIAMOND HARBOUR, 135.

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DIBRUGARH, D.B., 497, 501.

Club: *Dibrugarh Dis-*
trict C.

Bank: *Imperial Bank of*
India.

Motor Supplies: *Russa*
Engineering Works.

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Kellner's Refreshment
and Retiring Rooms.

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(Dhone), (R.), D.B., 589.
Junction for Kurnool and
Secunderabad.

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DULAI, D.B., 392.

DUM DUM, 128.

Calcutta Flying Club
Aerodrome. Central
Hotel, near Aerodrome;
limited accommodation.

DUMRI, D.B., 59.

DUNCAN, JON., 11, 88, 90.

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R.H. in old Dutch Fort.
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ELLORA CAVES, 77-83.
 Easily reached from Daulatabad station. Write beforehand to Nusservanji, Aurangabad, asking him to send a motor-car to meet train. The excursion can also be made by car from Aurangabad (p. 83).
 Daulatabad station is 10 m. from Ellora. **R.H.** (well furnished) at Rauza, 2 m. from the caves; also **D.B.** and Hyderabad State Guest House at Ellora. Permission to occupy Guest House must be obtained from the Director of Archaeology, Hyderabad.
ELLORE (R.), cxi, 518.
Bank: *Imperial Bank*.
ELPHINSTONE, HON. M., 4, 12, 16, 23, 24, 375, 526, 531.
ELPHINSTONE, LORD, 12, 22, 616.
ENGLISH BAZAR, Malda Dt., 480; starting-place for Gaur.
Accommodation: There is a **D.B.** at English Bazar. A servant who can cook should be taken to Gaur and Pandua. A carriage can be obtained only by the kind services of the Magistrate.

ENNUR (Ennore), 520.
ERINPURA Rd., 214.
ERNAKULAM, 647.
ERODE, 639 (**R.** and **D.B.**); junction (for Trichinopoly).
 Sleeping accommodation at the rly. sta.
Bank: *Imperial Bank*.
ETAWAH (R.), 437.
D.B. $\frac{1}{2}$ m. from rly. sta.
Banks: *Imperial Bank*; *Allahabad Bank*.
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FARDAPUR, D.B., 68, $\frac{3}{4}$ m. from Ajanta Caves. Permission to occupy the **D.B.** is no longer required; but if arrangements for board are desired, intimation should be sent in advance to the Curator of the Ajanta Caves, Fardapur, *via* Pahur Ry. Stn.
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Bank: *Imperial Bank*.
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FERGUSSON, JAS., *Indian Architecture and Cave Temples of India, passim*.
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D.B., on Jhok Rd. in the Cantonment.
Bank: *Imperial Bank* (in Cant.).
Churches: *Church of England, Roman Catholic and Wesleyan* in Cant.; *American Presbyterian Mission* in the City.
Motors for hire.
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FRERE, SIR BARTLE, 4, 10, 12, 22, 410, 530, 547.
FYZABAD (R.), 429.
D.B. close to rly. sta.
Banks: *Imp. Bank*; *Allahabad Bank*.
Ajodhya, an ancient centre of Hinduism, is 4 m. distant.

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GADAG (R.), 583, 584.
D.B. $\frac{1}{2}$ m. from rly. sta.
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Hotel: *New Oriental H.*
Steamship Agencies: *Clan Line*, Clark, Spence & Co.; *British India S.N. Co.*, E. Coates & Co.; and *Asiatic Steamship Co.*, John Black & Co.
Banks: *Mercantile Bank of India, Ltd.*; *National Bank of India, Ltd.* (Agents: Clark, Spence & Co.).
Store: *A. R. Ephraim & Co.*

GALODAI (Kallodai), R. H., 750.

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GARHI HABIBULIA, D.B., 399.

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GAUHATI, D.B., 497.

Daily Motor Service to Shillong. See under latter.

GAUR, lv, c, civ, 480.

(See English Bazar.)

GAUTAMA: See Buddha.

GAWILGARH, 137.

GAYA, D.B., 56.

Bank: *Imperial Bank*.

H.M. GEORGE V., KING-EMPEROR, 13, 91, 108, 109, 111, 118, 152, 183, 219, 277, 288, 346, 370, 410, 468, 530, 600, 619, 743.

GERSOPPA FALLS, D.B., 594.

Motor-bus from Shimoga.

GHARAUNDA, 329.

GHATAL, 502.

GHAZIABAD, 336, 435.

Waiting and Refreshment Rooms at rly. sta. with sleeping accommodation.

GHAZIPUR, 474.

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GHOOM, 485: *Pines H.*

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GIRNAR MOUNTAIN, 240.

GITALDAHA, 497.

GOA (Panjim), 2, 27, 31, 553. British Consul at Mormugão.

Hotels: *H. Republica* and *H. Crescent*.

Motors available for drive to Old Goa.

In the cold season the Bombay Co.'s steamers leave Bombay daily, arriving at Panjim the following morning. 1st class accommodation for 8 persons; catering contractor on board, who charges rs. 6 per day for full messing. For route by rail see Route 27.

Steamship Agents: *B.I.S.N. Co.*, A. B. D. Souza (Mormugão); *Bombay S.N. Co.*, Killick, Nixon & Co. (Mormugão), *Goa Trading Co.* (Nova Goa).

GOALPARA, D.B., 497.

GOALUNDO GHAT, 135, 492.

Steamers (comfortable), daily mail service to Narainganj for Dacca and Mymensingh; and to Chandpur for Chittagong. Also steamers up the Ganges to Patna, and up the Brahmaputra to Dibrugarh.

GOBARDHAN, 261.

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GODHRA, 253.

Bank: *Imperial Bank*.

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GONDAL, 250.

Good **Guest House** and **D.B.**

GONDIA, 140.

GOOTY (R.), 540, 589.

GOPALPUR (Ganjam), 516.

Hotels: *Yatton Hall H. Beach View H.*

GORAKHPUR, 429, 475.

Banks: *Imperial Bank*; *Allahabad Bank*.

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GUJRANWALA (R.), 369.

D.B. close to sta.

Bank: *Imperial Bank*.

GUJRAT, D.B., 371, 391, 397.

GULBARGA, D.B., lv, 538.

GULISTAN, 418.

GULMARG, 397.

Hotel: *Nedow's* is the only *H.* Visitors, as a rule, take up their quarters in wooden huts rented through the Srinagar agencies (*g.v.*), or in tents. There are also several Boarding Houses.

GUND, 397.

GUNTAKAL (R.), 540, 589.

GUNTUR, 591.

Bank: *Imperial Bank*.

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The rly. sta. is about 1½ m. from Lashkar (New Town) and about 3 m. from Morar.

Hotel: *Grand H.* at Lashkar.

Club: *Elgin C.*

Bank: *Imperial Bank*.

Tongas: Fares from rly. sta. to Morar or Gwalior (Old City) or Lashkar, as. 8; per hour of detention, as. 4; double fare for return journey.

Gaol Carpets, etc., made to order, reasonable price, good work.

Pottery Works.

Missions: *Methodist Episcopal*; *Do. Zenana Mission*; *R.C. Church*.

GYANTSE, 492.

H

HABARANE, R.H., 770.

HAFLONG, 501.

HAILEY, SIR M., 49.

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HALEBID, 596.

HAMBANTOTA, R.H., 758, 776.

HAMMOND, SIR L., 496.

HAMPI (Vijayanagar), 585-588.

(The rly. sta. for Hampi is Hospet.)

D.B. at Kamalapur (7 m. from Hospet, and within $\frac{1}{2}$ m. of Ruins), good. The fee for its use is r. 1½ per diem, and the visitor must make his own arrangements about food, procurable at Hospet sta. Mosquito curtains should be brought. Butler in charge who can cook. The P.W.D. overseer is generally available as a guide.

HANAMKONDA, 520, 569.

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HANWELLA, R.H., 673.

HAPUTALE, R.H., 749, 754.

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HARDA, 45.

D.B. 3 minutes' walk from rly. sta.

HARDINGE, LORD, OF PENS-HURST, CXXIX, 64, 324, 484.

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Rly. to Dehra Dun.

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Motor service *via* Loralai to Fort Sandeman.

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HARPANAHALLI, 588.

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Motor - bus service to Belur.

HASSAN ABDAL, D.B., 380, 391, 399.

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HASTINGS, WARREN, 54, 88, 89, 91, 93, 106, 115, 119, 121, 124, 126, 130, 425, 430, 477, 478, 479, 615.

HATHRAS (R.), D.B., 269, 437.

Banks: *Imperial Bank; Allahabad Bank.*

HATTON (R.), 746.

Hotel: *Adam's Peak H., for Adam's Peak, q.v.*

Store and Chemists: *Brown & Co., Ltd.*

Bank: *Hatton Bank.*

Motors for Talawakelle to view the Devon and St Clair Falls; and for Laxapana for ascent of Adam's Peak.

HAVELOCK, GENERAL SIR H., cxxxiii, cxxxiv, cxxxv, 50, 442, 443, 454, 456, 457, 458, 461, 463, 464, 465, 467.

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Motor service (42 m.) from Hazaribagh Rd. sta.

District Board D.B.

Hotels: *Rose Cottage, Compton Court.*

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Lodgings to be had at large Pilgrim Bungalow.

HIKKADUWA, R.H., 755.

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HOROWUPOTANA, 760.

HORTON PLAINS, 746, 747, 748, 776.

R.H. $\frac{1}{2}$ m. from Pattipola Rly. Sta., write beforehand.

HOSDURGA ROAD, 594.

HOSHANGABAD, D.B., 152, 163.

HOSPET (R.), D.B., 584.

Rly. sta. for Hampi. Station-master will order conveyance.

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HOWRAH (Calcutta terminus), 67, 109, 130, 146, 446, 471, 502.

Banks: *Imperial; Mercantile.*

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Bank: *Imperial Bank.*

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Banks: *Imperial Bank; Central Bank.*

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HYDERABAD (Sind), 406.

D.B. in Cantonment.

Missions: *C.M.S. and Church Schools.*

Bank: *Imperial Bank.*

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D.B. $\frac{1}{2}$ m. from sta.

Church: *Anglican.*

Railway Institute.

IMMOLATION, SELF, 143, 155, 158, 186, 511.

IMPEY, SIR E., 111, 115, 119.

IMPHAL, 500.

INDORE (R.), D.B., 151.

Bank : *Imperial Bank.*

Reading Room and English Club.

Medical Man: The Residency Surgeon has a Nursing Home under his direction.

Churches : *English Church and R.C. Church*, both in the Residency.

INDRABETTA HILL, 598.

INNES, SIR C., 691.

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D.B. (R.) and Waiting Room at rly. sta.

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D.B. at Wan Radharam, $\frac{1}{2}$ m. from rly. sta.

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Hotels : *Jaipur H. ; The New H. ; Kaisar-i-Hind H.* The proprietors of these hotels have carriages for hire, and will, if necessary, make arrangements for visitors for the ascent to Amber.

Bank : *Imperial Bank.*

Hackney Carriages :

By time—

	Class I.	II.
Per day	5½ rs.	3 rs.
Per $\frac{1}{2}$ day	3 rs.	2 rs.
Per hr.	1¼ rs.	12 as.

By distance—

	Class I.	II.
1st mile	8 as.	4 as.
Subs. mile	4 as.	2 as.

Motors available.

Church : near the hotels.
Dealers in Silks, Indian Curiosities, etc., *Zoroaster & Co.*, good showrooms.

Enamel Work : *Sagan Chand Sabhag Chand ; Gulab Chand, Lunia & Co.*
School of Art has also good display, work to order.

Scottish Mission.

JAIPUR, MAHARAJAS OF, lxxiv, 224.

JAISALMER, lxxiii, 217.

JAISAMAND LAKE, 162.

JAI SINGH II., RAJA OF JAIPUR, 95, 154, 224, 225, 314, 325.

JAIPUR (Belatal), 177.

Dharmasala.

JAJPUR, 503.

JAKHAL, 340, 342.

JAKHLAUN, 172.

JAKKO HILL (Simla), 332.

JALALABAD, 354, 388.

JALALPUR, 374.

JALAMB, 136.

JALAPAHAAR, 485, 486.

JALARPET Junction (for Bangalore) (R.), 608, 638.

JALGAON, D.B., 43, 67, 195.
Nearest route (38½ m.) to Ajanta Caves.

Bank : *Imperial Bank.*

JALNA, 86.

Bank : *Imperial Bank.*

JALPAIGURI (R.), D.B., 484.

Bank : *Imperial Bank.*

JAMMALAMADUGU, R.E., 541.

JAMALPUR, 66, 472.

Kellner's Refreshment and Retiring Rooms at sta.

"JAMES AND MARY" SHOAL, the, 134, 502.

JAMMU, D.B., 370, 399.

JAMNAGAR, 251.

JAMRUD, 387.

JAMSHEDPUR, 145.

Bank : *Imperial Bank.*

JANG BAHADUR, SIR, 39, 64, 456.

JANGHAI, 429.

JANGSHAHI (R.), 468.

Rooms at the rly. sta.
Motors and carriages for Tatta available.

JASDAN, 235.

JATS (Bharatpur), 254, 267, 275.

JAUNPUR (R.), 431, 470.

D.B. close to Police Lines.

Hackney Carriages :

1st hr.	8 as.
Subs. hr.	4 as.
Rly. sta. to city	6 as.
Rly. sta. to civil station	10 as.

Motor Lorry services from Jaunpur to Machhlishahar and Badlapur.

JEEJEEBHUV, SIR JAMSETJEE, 12, 16, 18, 22, 25, 528, 532.

JETALSAR (R.), 235, 238.

JEWES, 646.

JHALRA PATAN, 253.

JHANSI (R.), 173-175.

Inspection House. D.B.

Banks : *Imperial Bank ; Allahabad Bank.*

Club : *Jhansi Club.*

Indian Club : *Silberrad Union.*

JHANSI, RANI OF, cxxxii, cxxxvi, 173-175, 182.

JHARSUGUDA, 143.

JHELMUM, D.B., 373, 391, 398.

JHERRIA COALFIELD, 66.

JHUNJHUNU, 229.

JIDDA, xlv.

JIND, 340.

JODHPUR, D.B., 215.

For permission to see the palace application must be made to the Mahkama Khas.

Bank : *Imperial Bank.*

JODHPUR, MAHARAJAS OF, lxxiv, 134, 215, 277.

JOGESWAR CAVE, 31.

JOGINDERNAGAR, 34°

JONES, SIR W., 115.

JOR BUNGALOW, 485.

JUBBULPORE (R.), D.B.
46.

Hotels: *Jackson's H.; Cowdeary's H.; Royal H.* This is the station for the expedition to the Marble Rocks (p. 47).

Banks: *Imperial Bank of India; Allahabad Bk.; Central Bk. of India.*

Motors: *Bombay Automobile Co.; C. P. Engineering Co.; Pattulal & Sons; Penty & Co.;* Motor-car hire as. 8 a mile; detention, r. 1 an hour.

Tongas, etc., may be obtained from Mrs Ford, Civil Lines, near Jackson's Hotel, and Weallans' Tonga Service (Rest Camp Road).

Tonga fares: 1st class, r. 1 per hr., as. 8 per sub. hr.; rs. 5 per day. To Marble Rocks and back, rs. 4 to rs. 5.

Missions: *C.M.S.; Ch. of England Zenana; R.C. Church; Wesleyan Mission, and various American Missions.*

JULLUNDUR, 342.

D.B. in Cantonments, about 1 m. from Cantonment rly. sta.

Bank: *Imperial Bank (in City).*

JUNAGADH, lvi, 238.

Accommodation and conveyances on application to the Diwan of the State. There is a fine **Guest House** for Indians and officials of rank. D.B. close to rly. sta.

JUTE, 483, 494.

JUTOGH, 332.

JYAVAGAL, 596.

K

KABUL, l, 384.

KACH for Ziarat, 419.

D.B. open May to October (rs. 32 for a motor, rs. 10 for seat in motor).

KADALUNDI, 649.

KADUGANNAWA, 662, 741.

KADUWELLA, R.H., 740, 752.

KAHUTA, 399.

KAIRA, 200.

KAITHAI, 331.

KALABAGH, 383.

KALANAUR, 347.

KALA OYA, R.H., 760.

KALAW, D.B., 706.

Hotel: *Harfield Hotel.*

KALAWAWEA, 684, 761, 763. Accommodation at Govt. Bungalow on the Bund by arrangement beforehand with the Divisional Irrigation Engineer.

KALIMPONG, 484, 489.

Hotel: *Himalayan Hotel:* Proprietor will arrange a car for the journey from Kalimpong Road station.

KALINGAPATAM, 517.

KALINJAR, 163, 165, 229, 177, 179, 260.

KALKA, 331.

Railway to Simla.

Hotel: *Lowrie's H.,* next door to P.O. and T.O. (open throughout the year).

KALMUNAI, R.H., 776.

KALNA, 67.

KALPI (Bengal), 135.

KALPI (Bundelkhand), D.B., 175.

KALSI, 422.

KALUNGA, 144.

KALUTARA, R.H., 755.

KALYAN, 38, 521.

R. and Waiting Rooms.

Motors, pony-tongas and bullock-carts for hire.

KAMALAPUR, D.B., 585.

See *Hampi*.

KAMANDRUG HILLS, 34.

KAMPTI, D.B., 139.

KANAKARAYANKU LAM, 769.

KANARAK, xcix, 512, 514.

KANAUJ, 437.

KANDAHAR, 418.

KANDAPOLA, 669, 748.

KANDY, xxii, 744.

Hotels: *Queen's H.; H. Suisse,* facing the lake.

Club: near Mercantile Bank.

Hackney Carriages: rs. 2½ per ½ day; 1st hr., r. 1 c. 20; sub. hrs., c. 30.

Banks: *Mercantile Bank of India, Ltd.; National Bank of India, Ltd.*

Chemists: *Miller & Co.; Cargills Ltd.; Central Medical Stores.*

Shops: *Cargills, Ltd.; Miller & Co.; Plätté & Co. (for photographs); Whiteaway, Laidlaw & Co.; Col. Apothecaries' Co.*

Doctor: *G. Powell Hay.*

Missions: *C.M.S. sta.; Christ Church; Trinity Church, College, and Schools; St Paul's; Baptist Church; Wesleyan Church; Scots Kirk; St Anthony's Cathedral (R.C.).*

The headquarters of the Planters' Association of Ceylon (founded in 1854) are at Kandy.

KANGAN, 397.

KANGRA VALLEY, 348.

KANHERI CAVES, 32, 68, 524.

KANISHKA, EMPEROR, xci, 375, 384.

KANKARIYA LAKE, 207.

KANKESANTURAI, R.H., 741, 761, 770.

KANKHAL, 420.

KANKROLI LAKE, 162.

KANTALAI, R.H., 773.

KAPADVANJ, D.B., 199.

KAPILAVASTU, 475.

KAPURTHALA, 40, 343, 467.

KARA (Currah), 446.

KARACHI (R.), 409.

D.B. close to Arsenal.

Railways: From Lahore, Route 19; from Bombay and Rajputana, Route 10, p. 214.

Terminus of the Air Route to India. **Aerodrome.**

Hotels: *Bristol H., Sunnyside Road; Carlton H., near Cantonment rly. sta.; North-Western H.; Queen's Road, Killarney.*

Banks: *National Bank of India; Imperial Bank; Chartered Bank; Mercantile Bk.; P. & O. B. Corporation; Lloyds; Eastern Bk.*

Agents: *Cox & King, M'Leod Rd.; Eastern Express Co., corner of Bunder Road and Dunolly Rd.*

Newspapers: *Daily Gazette; Sind Observer; New Times; Sind Sudhar (vernacular).*

Basar: *Sadr Bazar, good.*

Cafes: *C. Grand; New C.*

Club: *Sind Club*, adjoining the Frere Hall Compound, with sleeping accommodation. Members can introduce friends as honorary members for three days.

Gymkhana and Ladies' Club within five minutes' walk from Sind Club.

Golf C., Polo C., Boat C., Sailing C.

Chemists: *Bliss & Co.*

Dentists: *C. & W. Smith.*

General Merchants: *Spencer & Co., M'Leod Road.*

Tailors: *Hoar & Co., Elphinstone Road.*

Hackney Carriages:

Class I. II.
Victoria.

1 hour or less 1 r. 12 as.

For every additional hour or portion of hr. 12 as. 9 as.

Missions: *C.M.S.; Methodist Episcopal.*

Motor-cars are available on hire.

Churches: *Holy Trinity; St Paul's (Manora); St Patrick's; St Andrew's (Church of Scotland); Methodist Episcopal Ch.*

Steamship Agencies: *P. & O. British India S.N. Co.; Mackinnon, Mackenzie & Co., M'Leod Rd.* Direct weekly S.S. meet incoming and out-going P. & O. steamers to and from Europe at Bombay. Weekly steamer to Persian Gulf; coast steamer bi-weekly to Bombay.

Ellerman, Hall, Bucknell and City Lines, Forbes, Forbes, Campbell & Co., Ltd. corner of Bunder Rd. and Dunolly Road.

Anchor Line; Graham's Trading Co., M'Leod Rd. Bombay Steam Navigation Co.; Killick Nixon & Co., Bunder Road.

Imperial Airways (Air Route to India). Agents: *Shaw, Wallace & Co., M'Leod Road.*

Consuls (constantly changing): *France; U.S.A.; Italy; Belgium; Netherlands; Norway; Portugal; Afghanistan; Brazil; Persia.*

KAREPALLI, 570.

KARIKAL, 661.

KARJAT, 522.

KARKAL, 653.

KARLI, 36, 523.

The best way to visit the **Caves** is to alight at Lonavla (G.I.P. Rly.), and drive to and from Karli.

KARNAL, D.B., 291, 329.

KARNATAK, 593.

KARUR, 640.

KARWAR, 593, 654.

KARWI TARAHWAN, 179.

KASARA (R.), 38.

KASauli, 332.

Schwood Boarding House.
Pasteur Institute.

KASHMIR, 1, 389-399.

KASIA (Kusinagara), lxxviii, xci, 475.

KASIMBAZAR, 478.

KASUR, 354.

Bank: *Imperial Bank.*

KATARAGAMA, 775.

KATAS, 374.

KATHA, 714, 715.

KATHGODAM (R.), 425, 426.

Railhead for Naini Tal.

Hotel: *Railway H.*

Motors and porters await the trains. Representatives of motor companies meet the trains at Haldwani and Kathgodam. Fares, rs.8 per seat. Reserved car; 4 seats rs.25, 6 seats rs.35. Heavy luggage conveyed by lorry at rs.2 per maund; servants can travel by passenger lorry (rs.4 per seat). Address Manager, Naini Tal Motor Transport Co., Kathgodam, for advance booking.

KATHIAWAR, 232.

KATIHAR, 472, 473, 476, 483.

KATMANDU, 1, 474.

KATNI, 48, 142.

Bank: *Imperial Bank.*

KATPADI (R.), 542.

Junc. for Vellore.

KATWA, 67.

KAUKHALI (Cowcolly), 502.

KAUNIA, D.B., 497.

KAURAVAS, lxii, 329, 330.

KAVANAGH, T. H., 456.

KAZIPET, 569, 570.

Junction for line to Balharshah and thence to Delhi, via Nagpur and Itarsi.

KEDGEREE, 135.

KEGALLA, R.H., 741, 752.

KEKIRAWA, R.H., 761, 763.

KELANI VALLEY, 741, 751.

KESHAB CHANDRA SEN, lxxvi.

KHAIRABAD (R.), 383.

KHAIRADA, 179.

KHAIRNA, 428.

KHAIRPUR, lvi, 405.

KHAJRAHO, xciii, xcvi, civ, 178.

Motors and lorries available from Harpalpur.

KHAMGAON, D.B., 130.

Bank: *Imperial Bank.*

KHANA, 66, 471.

KHANABAL, D.B., 395.

KHANDAGIRI CAVES, R.H., 507.

KHANDALA, 522.

Hotel: *Khandala H.*

KHANDWA, 44, 147.

R. and Waiting Rooms. Conveyances procurable.

D.B.

Bank: *Imperial Bank.*

KHARAGHODA, 233.

KHARGAPUR, D.B., 146, 502.

Baptist Mission.

KHARIAN, 373.

KHASIS, 499, 680.

KHERALU, 209.

KHIRKI (Delhi), 320.

KHOJAK PASS, 418.

KHOPOLI, 522.

KHURDA ROAD, 510.

KHUSHALGARH, 377.

KHUSRU, PRINCE, 49, 50.

KHWAJAH KHIZR ISLAND, 411.

KHYBER PASS, 386-389.

For Khyber Railway, see *Peshawar*.

KIAMARI, 410.

KILA ABDULLAH (R.), 418.

KINCHINJANGA, 486.

KINDAT, 730.

KIPLING, J. L., 18, 355, 359.

KIPLING, R., 18, 115, 119, 387, 467.

KIRIGALPOTA MT., 748.

KIRINDA (R.H.), 758.

KIRKEE, 526.

KITCHENER, LORD, xlii, 116, 122.

KIUL JUNCTION, 66, 473.

KODAIKANAL (Palni Hills), 672. See *Ammayanayakkanur*.

Hotel: *Carlton Hotel*; also Boarding Houses.

In the season (March-June) motor-bus services between Ammayanayakkanur and Kodaikanal (50 m. in 4 hrs.). Charges—rs. 5 for seat; luggage rs. 2-8 per maund. Tel. address for seats: *General Kodaikanal*.

Petrol: available at *Co-operative Stores*.

KODKANI, D.B., 595.

KOHALA, D.B., 392.

KOHAT, D.B., 377, 386.

KOHIMA, 500.

KOHINUR, the, 181, 280, 290, 358, 511.

KOIL (Aligarh), 435.

KOILPATTI, 677.

KOLA GHAT, 502.

KOLAR GOLDFIELDS, 607.

A short branch railway runs from Bowringpet to the Goldfields. Circuit House, used as a Travellers' Bungalow at Robertsonpet.

KOLHAPUR, 549.

KONDAPALLI, 570.

KONKAN, the, 38, 521, 523, 544.

KOPPAL, 584.

KORA (Corah), 445.

KORBA, 143.

KOREGAON (Corygaum), 534.

KOSI KALAN, 265.

KOSLANDE, R.H., 754.

KOTAGIRI, 645.

Hotels: *Blue Mountain H.*; *Beautieu Manor H.*

Club: Kotagiri.

General Merchants: *Spencer & Co.*

KOTAH (R.), 199, 253.

D.B., 2 m.

KOTGARH, D.B., 334.

KOTHAGUDAM, 570.

KOTKAPURA (R.), 353.

KOTLI, 399.

KOTRI (R.), 408, 415.

D.B. not far from Bandar rly. sta. (provisions must be taken).

KOTTA, 740, 745.

KOTTAYAM, 648.

KRISHNA (Kistna), RIVER. 518, 520.

KRISHNA, 247, 248, 251, 258, 259-263, 438, 581, 584, 638.

KRISHNAGAR, 476.

KRISHNAGIRI, 638.

KUCHAMAN ROAD, 219.

KUCHI BANDAR (Cochin), 646.

KUDRA, 55.

KULANGAM, 393.

KULASEKHARAPATNAM, 679.

KULAURA, 495.

KULU VALLEY, 335, 350, 351.

KUMARHATTI, 332.

KUMBAKONAM (R.), D.B., 663.

Bank: *Imperial Bank*.

KUMBHA RANA, 158, 214, 220.

KUMBH MELA, 52, 421.

KUMUNA, 776.

KUNDAPUR, 654.

KURDUWADI JN. (R.), D.B., 537.

KURLA, 10, 37.

KURNOOL (Madras), 589, D.B.

KURSEONG (R.), D.B., 485.

Hotel: *Clarendon H.*, good, pleasant place for breaking journey. Several Boarding Houses. Some people prefer this place to Darjeeling.

Club: *Kurseong*.

KURUKSHETRA JUNC., 330, 351.

KURUNEGALA, R.H., 741, 745, 761.

KUSHANA DYNASTY, the, xci, 53, 476.

KUSINAGARA (Kasia), lxxviii, xci, 475.

KUTB (Delhi), c, 222, 289, 315-318, 515.

Small D.B. close to the great mosque.

Police Rest House in the tomb of Adham Khan. Application must be made beforehand to the Deputy-Commissioner, Delhi, for permission to stop there.

KUTB-UD-DIN AIBAK, KING OF DELHI, 88, 100, 221, 315, 318, 358, 435, 438.

KUTTALAM, D.B., 679.

KYAUKPYU, 728.

KYAUKSE, D.B., 706.

KYD, COL., 121, 127.

L

LAHERIA SARAI, 473, D.B.

LAHORE (R.), 355-369.

Railway: From Bombay, Routes 10, 12, 15; Delhi, Route 15(b); to Peshawar, Route 17; to Karachi and Quetta, Route 19.

Hotels: *Nedou's H.*, *The Mall*; *Cecil H. (Faletti's)*, *Queen's Rd.*; *Stiffle's H.*, *The Mall*; and others.

Clubs: *Punjab Club*, *Gynkhana*, *Murray Club* (in Cantonment).

Banks: *Imperial Bank*; *Allahabad Bank*; *Commercial Bank of India*; *National Bank of India*; *Punjab National Bank*.

Agents: *Grindlay & Co.*

Chemists: *Plomer*; *Smith & Campbell*; *Frank Bliss*.

Tailors: *Ranken*; *Ball Moody*; *Fillingham*.

Bootmaker: *Watts*.

Drapers: *Whiteaway*, *Laidlaw*; *Ball Moody*.

Taxis: available at any time.

Hackney Carriages:

Class I.

1st hr. 1 r. 4 as.
subs. hr. 12 as.

To Lahore Cantonment, Shalimar or Shahdara and back 2 rs.

For each hr. of detention 12 as.

Newspapers: *Civil and Military Gazette*; *Tribune*.

Churches: *Cathedral*; *R.C. Cathedral*; *Presbyterian*; *Wesleyan*.

Missions: *C.M.S.*, St John's Divinity School, Zenana Mission, and Trinity Church; *American Presbyterian*; *Forman College and Church*; *R.C. Cathedral*; *Scotch Church*.

LAHORE CANTONMENT, D.B., 355, 366.

LAHUGALAWEWA, 775.

LAKE, LORD, 118, 231, 254, 263, 265, 267, 277, 290, 301, 329, 330, 435.

IAKHISARAI (Kiul Junction), 66, 473.

LAKKANDI, 583.
 LAKSAM JN., 495.
 LALABEG, 388.
 LALA MUSA (R.), 372.
 LALGOLA GHAT, 480.
 LALITPUR, D.B., 172, 176.
 LALLY, COUNT, 618, 619, 633, 655, 657, 663.
 LANDI KHANA, 386, 388.
 LANDI KOTAL, 386, 388.
 LANDOUR, 423.
Boarding House; Rokeby.
 LANSLOWNE, 424.
 LARKANA, D.B., 412.
Bank : Imperial Bank.
 LASALGAON, 42.
 LASHIO, 714.
 LASHKAR (Gwalior), 180-184.
Hotel : Grand Hotel.
 LASUNDRA, 199.
 LASWARI, 231.
 LATS OF STONE, 91, 308, 309, 474.
 LATUR, 537.
 LAURIYA, 474.
 LAWRENCE MEMORIAL SCHOOLS; Mount Abu, 211; Murree, 376; Ootacamund, 643; Sanawar, 332.
 LAWRENCE, MAJ. GEN. STRINGER, 118, 616, 618, 668, 670.
 LAWRENCE, SIR HENRY, lxviii, cxxx, cxxxii, cxxxiv, 116, 128, 332, 353, 356, 439, 451-452, 458, 459, 460, 465, 467, 757.
 LAWRENCE (SIR JOHN), LORD, cxxxiii, cxxxiv, cxxxvi, 112, 292, 333, 356, 357, 367, 385.
 LAXAPANA, 746.
 LEBONG, 487.
 LEH, 397.
 LETPADAN, 722, 729.
 LHAKSAR, 420.
 LIDDAR VALLEY, 395.
 LIMBDI, 235.
 LINGAMPALLI, 558.
 LLOYD, SIR G. (now LORD) 6, 412, 532.
 LODHRAN, 400, 403.
 LODI, — BAHLOL, IBRAHIM, and SIKANDAR, 181, 257, 267, 313, 318, 321, 327, 328, 341, 433.
 LOLAB VALLEY, 393.
 LONAR, LAKE, 130.
 LONAULI (Lonavla) (R.), 36, 523.

Hotels : *Lonauli H.; Woodland's H. and Hamilton H.*, $\frac{1}{2}$ m. and $\frac{1}{2}$ m. respectively from the rly. sta. Best starting-place for drive to the Karli Cave.
 LONDA (R.), 552, 593.
 LORALAI, 419.
 LUCKNOW (R.), ci, cxxxiii, cxxxiv, cxxxv, cxxxvii, 446-470.
Railway : From Saharanpur and Benares, Route 20; from Cawnpore, Route 21; from Allahabad, Route 21.
Hotels : In Abbott Road, *Royal H.*; in Clyde Road, *Carlton H.*
Restaurant : *Hakman's Criterion.*
Clubs : *United Service*, in the Chatar Manzil Palace; *Mohammed Bagh C.*, Cantonments.
Banks : *Imperial Bank; Allahabad Bank; Central Bank.*
Chemists : *Peake Allen & Co.; Herbert Montague.*
General Merchants : *Murray & Co.*
Indian Curio Dealer : *Bhola Nath Kapoor*, in the Chowk.
Jewellers : *Landau; Perry & Co.; Minoo & Dinshaw.*
Opticians : *Lawrence & Mayo.*
Photographers : *Lawrie; D. Noll; C. Mull.*
Drapers : *Whiteaway, Laidlaw; Trevillion & Clark.*
Hackney Carriages and Motors available.
Motor Firms : *Allan Berry, Ford Motors* (Upper India); *Edujee.*
Churches : *Christ Church, R.C. Church, Amer. M.E. Church.*
Hospitals : *King George's Medical Coll. and Hosp.*, and others.
Missions : *C.M.S.* (at Zahur Bakhsh), Church of Epiphany and Schools; *Methodist Episcopal of U.S.A.; R.C. Churches.*
The Museum (Ajaib Ghar) is closed at 3-30 and on Fridays.
Prince of Wales Theatre and Cinema; Elphinstone Picture Palace.

LUDHIANA, 341, 351.
 D.B. at rly. sta.
Bank : *Imperial Bank.*
Missions : *American Presbyterian; Medical and Zenana.*
 LUMDING, 495, 499, 501.
 LUNI JUNCTION, 214.
LUNUGALA, R.H., 750.
 LYALLPUR, 371.
Banks : *Imperial Bank; Allahabad Bank.*
 LYTTON, LORD, I, cii; II, 108, 111.

M

MACAULAY, LORD, 116, 117, 119, 612, 643.
 MACDONNELL, LORD, 271, 463.
 MACKESON, COL., 385, 387.
 MACNAGHTEN, SIR F. W., 111.
 MACNAGHTEN, SIR W., 117.
MADDUR (R.), 601.
 For the Cauvery Falls, jhatkas and tongas available, 30 m.
MADHAVAPUR, 250.
 MADHO RAO, PESHWA, lxx, 12, 47, 533.
MADHUBAN, 60.
MADHUPUR (R.), D.B., 66.
MADRAS, 613-626.
Railway : From Calcutta, Route 25; from Bombay, Route 26; from Bangalore, Route 32; from Ootacamund, Route 35; from Tuticorin and Ceylon, Route 36; to Delhi, p. 570.
Hotels : *Hotel Spencer; Connemara H.; Hotel Bosotio*—all in good positions in Mount Road. *Lloyd's H.*, Monteith Road, Egmore.
Agents : *Thomas Cook & Son*, 1/35 Mount Road; *Parry & Co.*, Beach (Agents for Cox & King); *Binny & Co.*, Armenian St. (Agents for Grindlay & Co.); undertake all business in connection with travelling, banking, and financial arrangements for travellers in India.
Banks : *Imperial Bank, Mount Road and Beach; Chartered Bank of India, Australia, and China, Esplanade; Mercantile Bank of India, First Line Beach; National Bank of Ind.*

First Line Beach; *Eastern Bank*, Broadway; *Central Bank of India*, Broadway.

Booksellers: *Higginbotham & Co.*, Mount Road; *Addison & Co.*, Mount Road; *G. A. Natesan*, George Town; *P. R. Rama Iyer & Sons*, George Town; *Madras News Agency*, Mount Road.

Chemists: *Spencer & Co.* (W. E. Smith & Co. Dept.), Mount Road and Esplanade; *W. Pereira*, Vepery; *Allbutt & Co.*, R. Maclure and J. F. Létaille, Mount Road.

Clubs: The *Madras C.* Central situation at 1 m. from the rly. sta. on Mount Road.

The *Adyar Club* admits ladies as well as gentlemen; it is 3 m. S. of Madras Club, and in its grounds the *Madras Boat Club* has its sheds. *Gymkhana Club* (Island); *Madras Cricket Club* and grounds, Chepauk. Indian: *Cosmopolitan Club*, *Union Club*, Mount Road; *United Club*, George Town; *Willingdon Club*, Egmore (Indian and European ladies).

Churches: Anglican: *St George's Cathedral*, *Christ Church*, Mount Road; *St Mary's*, Fort St George; *St Matthias*, Vepery; *Holy Cross*, Perambur; *Emmanuel*, George Town; *St Mark's*, N. George Town; *St Thomas*, San Thomé; *Tucker's Ch.*, Broadway; *Trinity Chapel*, Park Town. Church of Scotland: *St Andrew's*, Egmore. R.C.: *Cathedrals*, Armenian St. and San Thomé; *St Joseph's*, Vepery; *St Thomas*, Royapuram.

Restaurants and Confectioners: *Bosotto*, Mount Road; *Harrison & Co.*, Broadway.

Consuls: U.S.A., Mercantile Bank Bldg., First Line Beach. *France and Belgium*, c/o Walker & Co., Beach. Other nations also represented.

Taxi-cabs available: fare, as. 10 for the first mile, and as. 2 for each subsequent 1/4 mile.

Hackney Carriages available: fares usually from rs. 5 to rs. 7 for whole day; rs. 3 for half a day.

Drapers: *Whiteaway*, *Laidlaw & Co.*; *Wrenn*, *Bennett & Co.*; *Spencer & Co.*; *E. D. Smith*; Mount Road.

General Merchants: *Spencer & Co.*; *Addison & Co.*; *Oakes & Co.*

Jewellers: *P. Orr & Sons*, Mount Road; *Framjee Pestonjee Bhungara*, Mount Road.

Libraries: *Connemara Public Library*, Egmore; *Literary Society*, College Road, Nungumbaukum; *Theosophical Society*, Adyar.

Markets: *Moore Central Market*, near Central rly. sta.; *Smithfield Market*.

Medical Men: The officers at the several Government Hospitals.

Missions: The S.P.G. (Mission House in Rundall's Road, Vepery) serve the following Churches — *St Thomé*, *St Paul's* (Vepery), and *St John's* (Egmore), and have charge of a Theological College in Sullivan's Gardens; also of Schools and Orphanages. *C.M.S.* (at Egmore), *Holy Trinity Church*; *Divinity School*, and *Harris High School*; *R.C. Church*, Armenian St. There are also other Missions: *U.F. Church of Scotland*, *Lutheran*, *Wesleyan*, and *American Baptist*.

Motor Dealers: *Oakes & Co.*; *Simpson & Co.*; *Addison & Co.*; *Fiat Motor Agency*.

Newspapers: Daily Papers, *The Madras Mail*, *The Daily Express*. Indian: *The Hindu*, *New India*, *Justice*.

Railways: There are two railway systems terminating at Madras:—

(1) Madras and S. Mah-ratta Railway; (2) S.W. line for Bangalore, Nilgiris, West Coast and South-West Districts; (3) N.W. line for Guntakal, Wadi, the Deccan Districts and Bombay, and for Bezvada, Vizagapatam, Cuttack, and Calcutta; *Central Station*,

(2) South Indian Railway for Tanjore (Trichinopoly), Madurai, Dhanushkodi, Tinnevely, Quilon, and Tuticorin and Colombo; *Egmore Station*.

Steamship Agencies: *P. & O.* and *British India S. N. Co.*; *Binny & Co.*, Armenian St. Frequent sailings for Coast Ports, Calcutta, Burma, Straits Settlements, Colombo for London. Passages also booked via Bombay.

Messageries Maritimes, North Beach.

Asiatic S.N. Co., *Best & Co.*, Beach. For Coast Ports, Calcutta, Burma, Andamans, etc.

Clan Line, *Gordon*, *Woodroffe & Co.*, Beach.

Ellerman's City and Hall Lines, *Best & Co.*, Beach.

Bibby Line (Burma and Liverpool, via Colombo), *Gillanders*, *Arbuthnot & Co.*, Beach.

Lloyd Triestino (via Bombay), *Volkart & Co.*, Armenian St.

MADUGODA, R.H., 745.

MADURA (R). 673-677.

D.B. close to rly. sta.

Sleeping accommodation at the rly. sta.

Bank: *Imperial Bank*.

Club: *Madura Club*, 2 1/2 m. from the rly. sta.

Conveyances: Motors available.

Guides: rs. 5 per diem.

MADUWANWELA, 753.

MAGAR PIR, 411.

MAGWE, 720.

MAHABALESHWAR, 544.

Hotels: *Frederick's H.*; *Hotel Russe*.

Club with bedrooms attached.

Government Mail Motor Contractors: *Chinoy & Co.*

Motor Cars from Poona, in 4 1/2 hrs. Tel. address for inquiries regarding cars or seats: *Autocar*, *Poona* and *Autocar*, *Mahabaleshwar*.

Mail Motor Car: (1st Oct. to 15th June), rs. 10 per seat.

Tonga Owners: *Burjorji Perojshaw*; *Sonu Narayan Bros.*; *Karim Bala Bagwan*.

House Agent: *P. D. Dikshit*.

MAHABALIPURAM, 634.
638.

MAHABAN, 260.

MAHABHARATA, lx, lxii, 87,
192, 265, 289, 327, 329, 330,
602, 632.

MAHA BANDULA, 689, 723.

MAHAMUNI, 728.

MAHA OYA, R.H., 750.

MAHARA, 741.

MAHARAJPUR, 129, 181.

MAHASU, 334.

**Hotel: Wild Flower
Hall Hotel.**

MAHAYANA, xxxii, 69, 85, 384.

MAHE, 650-651, 658.

MAHENDRAGIRI, 516.

MAHESH, 131.

MAHIM, 191.

Scottish Orphanage,
established 1859, the only
institution of its kind in the
Bombay Presidency.

MAHINDA (MAHENDRA), lxxxii,
165, 734, 735, 768.

MAHMUD BIGARA, 199, 200,
202, 205, 206, 207, 208, 209,
238, 240, 252.

**MAHMUD, EMPEROR OF
GHAZNI**, lv, 88, 147, 210,
220, 246, 248, 257, 260, 350,
360, 375, 402, 429.

MAHMUD KOT (R.), 372.

MAHO, R.H., 761.

MAHOBA, D.B., 177.

MAHRATTAS, lxix-lxxii, 3, 34,
37, 49, 127, 138, 171, 172,
173, 181, 193, 195, 197, 199,
217, 221, 258, 267, 277, 290,
305, 328, 336, 526-535, 594.

MAHRAULI (Delhi), 319,
362.

MAHULI, 549.

MAKLI HILL, 408.

D.B. (necessary to bring
food) 1½ m. from Tatta; the
building was originally a
mosque.

MAKRANA, 118, 205.

MALABAR, 645-652, 680.

MALAKAND PASS, 383.

MALAPPURAM, 649.

MALCOLM, SIR JOHN, 12, 24,
148, 544, 550, 584, 612, 619.

MALDA, 480.

MALER KOTLA, 342.

MALIK AMBAR, 75, 76, 83, 85.

MALOT, 374.

MALTA, xxxv-xxxviii.

MALVALI, D.B., 601.

MAMALLAPURAM, xciv,
634-638.

MANALI, 335, 336.

MANANTODDY, 651.

MANAPAD, 759.

MANASBAL LAKE, 393.

MANOHAR LAKE, 414.

Anyone making a shoot-
ing expedition on this lake
will find, *not* Sehwan, but
Bubak Road Station (8 m.
from Sehwan) the nearest
rly. sta. to the lake. Ar-
rangements for shikaris and
camels should be made
through the Station-master
at Bubak Road Station.

MANDALAY, D.B., 683, 686,
690, 704, 706-712, 714.

**Communications: Irra-
waddy Flotilla Coy.**, Ex-
press Steamers from Ran-
goon every Tuesday and
Saturday, from Mandalay,
every Sunday and Thurs-
day. Also daily rail service
between Mandalay and
Rangoon, Mandalay and
Maymyo, and Mandalay
and Amarapura.

Visitors are recommended
to use the Rly. Rest Rooms
and the Circuit House.

Hotel: Grand (C. Road).

**Club: The Upper
Burma Club** (residential).

**Banks: Imperial Bank
of India; National Bank
of India.**

**Missions: Winchester
Brotherhood (Church of
England); American
Baptist; Wesleyan; R.C.
Church.**

**Chemists: Curtis & Co.;
the English Pharmacy**,
B. Road.

**Drapers and General
Outfitters: Whiteway,
Laidlaw & Co.; Roue &
Co., B. Road; Watson &
Sons**, Merchant St.

**Conveyances: Motor-
omnibuses, rubber: tyred
hackney carriages and taxi-
cabs. Electric tram-service.**

**General Stores and Pro-
vision Merchants: Upper
Burma Stores, Merchant
St.; Mandalay Stores, B.
Road.**

**Newspaper: The Upper
Burma Gazette.**

**Photographers: Mikado,
Merchant St.; Johannes
& Co., C. Road.**

MANDAPAM, 680.

Examination by Ceylon
Health Officer of passengers
for Colombo.

MANDAR HILL, 472.

MANDASOR, 154.

MANDHATA, D.B., 147.

MANDI, 348.

MANDLA, 140.

MANDOR, 217.

MANDU, 149, 319.

By motor from Mhow
(55 m.).

MANDVI, 233.

MANGALORE, D.B., 31, 652.

Shepherd's steamer (Bom-
bay S.N. Co.) weekly to
Bombay from middle Sept.
to end of May (p. 653).

Bank: Imperial Bank.

**Mission: R.C. Cathed-
ral.**

MANGI, 419.

MANHARPUR, 144.

MANIA, 190.

MANIKPUR (R.), 48, 176.

MANIKYALA, 237, 375.

MANIPUR, 500, 730.

MANIYACHI, 677. **Junc.**
for Tinnevely and Quilon.

MANMAR (Manmad) (R.),
D.B., 42, 73, 537.

MANNAR, R.H., 702, 769.

MANPUR, 149.

MANSEHRA, D.B., 383, 399.

MAN SINGH, RAJA OF GWALIOR,
181, 185.

MAN SINGH, RAJA OF JAIPUR,
95, 224, 228, 374, 471.

MANU, CODE OF, lvii.

MARADANA, 740, 751.

MARAVILA, R.H., 759.

MARBLE ROCKS, 47.

Two small D.Bs. 12 m. from
Jubbulpore; motors can be
hired. Tongas, rs. 4 to rs. 5.

MARCO POLO, 37, 246, 653, 679.

MARGALA, 377.

MARGHERITA, 500.

MARIAM UZ ZAMANI, 224, 280,
283.

MARIANI, 500.

MARSEILLES, xxxv.

MARTABAN, 705, 723.

MARTAND, xciii, 396.

MARTIN, GEN. CLAUDE, 112,
464, 466.

MARWAR, Junc., 214, 220.

MARWARIS, THE, 60, 152, 218.

MASHOBRA, 334.

Hotel: Gables Hotel.

MASKELIYA, 668.

MASULIPATAM, D.B., 520.

Bank: *Imperial Bank*.

MATALE, 744, 762.

R.H. practically an hotel.

MATARA, R.H., 757.

MATHERAN, 521.

Much frequented from Sat. till Mon. in the season.

Hotels: *Granville H.*; *Rugby H.*

MATIANA, D.B., 334.

MATTANCHERI, 646.

MAU (Ranipur), 176.

D.B. $\frac{1}{2}$ m. from rly. sta.

MAUBIN, 723, 729.

MAURYAN DYNASTY, the, lxxv, lxxxii, 52, 102, 103.

MAWLAIK, R.H., 730, 731.

MAYAVARAM (R.) D.B., 661.

MAYMYO, 714.

Hotels: *Lizette Lodge Hotel*; *Craddock Court* (application for vacant rooms to be made to Exec. Engineer, P.W.D., Maymyo).

MAYO, EARL, 50, 112, 116, 223, 225, 226, 375.

MAYO MINE, 375.

MEDAHAMAHA NUWARA, 745.

MEDAWACHCHIYA, R.H., 741, 761.

MEERUT, D.B., cxxxii, 337.

Hotels: *Stiffles' H.*; *Empress H.*; *Royal H.*

Clubs: *Wheeler C.*, *Tent Club* (pigsticking).

Banks: *Imperial Bank*; *Allahabad*.

Motors: *Collet Bros.*; *Oriental Automobile Co.*; *Graduate Bros.*; *U. P. Eng. Works*; *Provincial Motor Co.*

Churches: *St John's (C.E.)*, *Wesleyan*, *Scotch*, *R.C.*

Missions: *C.M.S.*; *Zenana*; *Methodist Episcopal*; *R.C.*; *Scotch*.

MEHKAR, 130.

MEHMADABAD, 200.

Waiting Room at rly. stn.

MEHSANA, 209, 252.

MEIKTILA, 706.

MERCARA, 607.

MERGUI, 727.

MERTA ROAD, 217, 219.

METCALFE, SIR C., cxxx, 125.
METCALFE, SIR T. T., 296, 298, 307.

METTUPALAIYAM (R.), 641.
Junction of S. Indian Rly. with Nilgiri Mountain Railway to Coonoor and Ootacamund.

Warm waters should be kept handy.

MHOW, 148.

Craven's Hotel.

D.B.; Refreshment and Waiting Room at rly. stn.

Motor service (55 m.) to Mandu through Dhar: route also to Caves of Bagh (p. 150).

MIAN MIR, 355, 367.

MIANI (Kathiawar), 249.

MIANI (Sind), 407.

MICHNI KANDOO, 388.

MIDNAPORE, 502.

D.B., close to rly. stn.

Missions: *American Baptist*; *S.P.G.*; *Roman Catholic*.

MIHINTALE, R.H., 760, 768.

MINBU, 720.

MINGALADON, 697, 703.

MINGIN, 730.

MINGUN, 713.

MINHLA, 720.

MINNERIYA, 770, 773.

MINTO, LORD, i, cii, 129; ii, 116, 161, 164, 297.

MIRAJ (R.), 549.

D.B. near stn.

MIR JAFIR, 105, 119, 477, 478, 479.

MIR JUMLA, 492, 493, 565.

MIR KASIM, 65, 338, 472, 478.

MIRZAPUR, D.B., cxi, 54.

Club: *Mirzapur C.*

Bank: *Imperial Bank*.

MIYAGAM, 197.

MOGAUNG, 715.

For Jade Mines, 80 m.

MOGHALPURA, 347.

MOGOK, D.B., 716.

MOHENJO-DARO, lxxxvii, civ, 413.

MOHPANI COAL MINES, 46.

MOKAMEH (R.), 66, 475.

MOMINABAD (Amba), 86.

MONGHYR, D.B., 472.

MONTAGU, E. S., 8, 111, 618.

MONTGOMERY (R.), D.B., 400.

Banks: *Imperial Bank*; *Punjab National Bank*.

MONTGOMERY, SIR R., cxxxiii, 356, 367, 400.

MONTPEZIR CAVES, 33.

MONYWA, 713, 730.

MOPLAHS (Mappillas), 588, 649.

MORADABAD, 424.

D.B. about 2 m. N. of rly. stn. Waiting Rooms at rly. stn.

Banks: *Imperial Bank*; *Allahabad Bank*.

MORAPPUR, 638.

MORAR, 180.

MORATUWA, 755.

MORMUGÃO, 552.

Hotel: *Hotel Antico Palacio*.

British Consul.

MORTAKKA, R.H., 147.

Starting-place for Omkarji.

MORVI, lxxiii, 234, 252.

"MOTHER RIGHT" CUSTOM, 499, 649, 680.

MOTIHARI (D.B.), 474.

MOULMEIN, 705, 723.

Hotels: *Silverdale and Silver Oaks*.

N.B.—Board and lodging obtainable at the Circuit House on application to the Deputy Commissioner, but only if the hotels are full.

Clubs: *The Gymkhana*; *The Old M.V.A. Club*.

Bank: *Imperial Bank*.

Chemists: *The New Medical Hall*, Lower Main Road; *De Souza's*, Lower Main Road; *The Moulmein Pharmacy*, Mission Road.

Motors: *Van Bock*; *G. M'Kenzie & Co.*

Hackney Carriages: Generally superior to those met with in other towns in Burma.

Physicians: The Civil Surgeon, and several private practitioners.

Newspapers: *The Moulmein Advertiser*; *The Moulmein Daily News*.

MOUNT ABU, xciii, xcvi, 211.

Conveyances. See Abu Road (17 m.).

D.B. on the hill.

Hotel: *Rajputana H.*

Club: *Rajputana C.*

Mission: *C.M.S.*

MOUNT LAVINIA, 740, 755.

Hotel: *Grand H.*

MUDBIDRI, 653.

MUDKI, 342, 354.

MUGHALSARAI (R.), 54, 434.

MUHAMMAD, 1.

MUHAMMAD BIN KASIM, 402.

MUHAMMAD GHAIUS, 184.

MUHAMMAD GHORI, 254.

MUHAMMAD SHAH, KING OF DELHI, 290, 313, 330.

MUKAND DWARA PASS, 253.

MULTAN, 401.

Refreshment and Waiting Rooms; D.B. about 1 m. N. of Cantonment rly. stn.

Bank: *Imperial Bank.*

Hackney Carriages:

There are few 1st and 2nd class hackney carriages; those of 3rd and 4th and tongas are chiefly in use.

Fares, Class III., as. 8 for 1st hr., Class IV., as. 6 and less for subsequent hrs.

MUMBRA, 35.

MUNNAR, 640.

MUMTAZ-I-MAHAL, 44, 268.

MUNRO, SIR HECTOR, CXXX, 61, 633, 651, 657.

MUNRO, SIR T., 546, 551, 589, 615, 616, 618.

MURREE, 377, 392.

Hotels: *Cecil; Metropole; Viewforth; Lockwood; and others.*

Club: *Rawalpindi Club (Murree Branch).*

Banks: *Imperial; Lloyds; B. of Northern India.*

Schools: *Lawrence Intermediate College; St Denys' School; Convent of Jesus and Mary; Presentation Convent.*

MURSHIDABAD, 471, 478.

D.B. at Berhampore.

MUSEUMS, XXXV, civ, 14, 22, 101, 113-115, 161, 164, 183, 185, 198, 226, 256, 301, 357, 378, 384, 401, 410, 413, 417, 458, 463, 487, 493, 547, 564, 600, 623, 680, 702, 739, 743, 745.

MURTAZAPUR, 137.

MUSHKAF, 416.

MUSSOORIE, 423.

See Dehra Dun. Route from Simla (13 marches) on p. 335.

Hotels: *Savoy H.; Charleville H.; Hakman's Grand H.; Cecil H.; and others.*

Club: *Happy Valley.*

Banks: *Imperial Bank; Allahabad B.; Bhagwan Das B.*

Churches: *Christ Church (Anglican); Scotch; R.C., and Union Church.*

Newspaper: *Mussoorie Times.*

Chemists: *Fitch; Hammer; Jacobs.*

Dentists: *Dr Ross Ferguson; Dr M. A. Shah; Dr Haskew; Dr Sechrest.*

Photographers: *Rust; Kinsey & Co.*

Drapers: *Trevellion & Clark; Evans, Fraser & Co.; Whiteaway Laidlaw.*

Tailors and Hosiery: *Draper & Co.*

Schools: *St George's College; E. J. R. Schools; St Fidelis High School; Woodstock Girls' School; Hampton Court; Caineville; Convent; Woodlands; Wynberg.*

MUTTRA (R.), D.B., xci, 199, 255, 265.

Hotel.

Banks: *Imperial Bank of India; Allahabad Bank.*

Missions: *C.M.S.; Methodist Episcopal; Wesleyan; R.C. Church.*

MUTUR, R.H., 750.

MUZAFFARPUR, D.B., 474.

Bank: *Imperial Bank.*

MYINGYAN, 706, 716.

Bank: *Imperial Bank.*

MYITKYINA, 713, 714, 715.

MYITTHA, 706; River, 731.

MYLAPORE, 617, 625.

MYMENSINGH (R.), 494.

Bank: *Imperial Bank.*

MYOHAUNG, 728.

MYONAUNG, 722, 723.

MYNSORE CITY (R.), 606, 649.

Hotels: *Metropole; Carlton; also Travellers' Bungalow near rly. stn.*

N

NABA (Burma), 714.

NABADWIP, 476.

NABHA, 339, 340.

NADIA, 134, 476.

NADIAD, 200.

Bank: *Imperial Bank.*

NADIR SHAH, KING OF PERSIA, lvi, 290, 300, 304, 330, 408.

NAGA RAJAS, 70, 73, 509, 637.

NAGAI, 557.

NAGAR (Ahmadnagar), 536.

NAGAR (Kulu), 335, 350.

NAGARCOIL, 678.

NAGOUR, 218.

NAGDA, 154, 199, 253.

NAGINA, D.B., 424.

NAGORE, 667.

NAGPUR, D.B., 138.

Waiting Rooms at sta.

Club: *Central Provinces.*

Banks: *Imperial Bank; Allahabad Bank.*

Missions: *United Free Church of Scotland; R.C. Church; Scottish Episcopal Mission.*

Chemists: *Amrut Pharmacy.*

Hospitals: *Mayo, Mure Memorial, Dufferin (Women).*

Motors and Hackney Carriages available.

NAIHATI, 67, 476, 483.

NAINI (R.), 48.

NAINI TAL, 426.

From Kathgodam to Naini Tal Brewery by motor. See Kathgodam.

Hotels: *Metropole H.; Royal H.; Grand H.*

Churches: *St John in the Wilderness (Anglican); St Francis (R.C.).*

Clubs: *Naini Tal Club, near St John's Church; Indian Club, on the N. Mall; A.F.I. Club, near the "Flats"; Assembly Rooms with Library.*

Banks: *Allahabad; Imperial; Naini Tal Bank.*

House Agents: *Mathias & Co.*

Newspaper: *Naini Tal Gazette.*

Chemists: *Reynolds & Co.; Gangi Sah; M. B. Mistri.*

Photographers: *D. Bird; Bankey Lal & Co.*

General Merchants: *Murray & Co.; Shapoorjee; Govin & Co.*

Drapers: *Whiteaway Laidlaw; Trevellion & Clark; Ram Lal Bose.*

- Tailors:** *Anderson Bros.*
Jewellers: *Rufener, Penny & Co.*
Hardware Merchants: *Jayat Hassain; Krishna Das & Bros.*
Municipal Markets at Talli Tal and Malli Tal.
- NAINPUR**, 140.
NAJIBABAD, 423.
NAKKALA, 775.
NALANDA (Bihar), civ, 64.
NALANDA (Ceylon), R.H. 762.
NALHATI, 471.
NANA FARNAVIS, 12, 38, 533.
NANAK, GURU, lxvii, 345.
NANA SAHIB (DHUNDU PANT), lxxi, cxxxi, cxxxv, 439, 445.
NANDANA, 375.
NANDER (R), lxxviii, 86.
 Waiting Rooms at sta.
 Travellers' bungalow close by.
- NANDIDRUG**, 592, 607.
 Hill station under the management of the Govt. of Mysore. Chairs from Nandi sta. (2½ m.), rs. 2-8 each way; coolie (for luggage), as. 4.
Hotel: *Cubbon Bungalow*; also five furnished bungalows.
- NANDOD**, 195.
Bank: *Imperial Bank.*
- NANDYAL**, 599.
Bank: *Imperial Bank.*
- NANJANGUD**, 607.
NANKANA SAHIB, 369.
NANUOYA (R.), 747.
NAPIER AND ETTRICK, LORD, 616, 677.
NAPIER OF MAGDALA, LORD, 122, 182, 297, 457, 530.
NAPIER, SIR C., 406, 407, 410.
NAPOLEON, 637, 661.
NARAINA, 228.
NARAYANGANJ, D.B., 492.
Bank: *Imperial Bank.*
- NARBADA RIVER**, 46, 47, 195, 196.
NARGUND, 551, 594.
NARI, 419.
NARKANDA, 334, 335.
 D.B. Six rooms, splendid view of snowy range.
NARNAUL, 214, 232.
NARWANA, 330.
NARWAR, 189.
- NASIK ROAD**, 39.
 Waiting Rooms.
Tramway to City, 5 m. distant, as. 8.
Tongas—
 For day (inside Station limits) . . . 5 rs.
 Rly. station to City or Dak Bungalow . . . 1 r. 6 as.
Taxi-Motors—
 Rly. station to City or Dak Bungalow . . . 3 rs. 12 as.
- NASIK**, xc, 39.
Hotel, ten rooms. Application for accommodation should be made to the proprietor.
Bank: *Imperial Bank.*
Mission: *C.M.S.* sta. at Sharanpur. See p. 41.
 Headquarters of *Royal Western India Golf Club*; good links.
- NASIM BAGH**, 394.
NASIRABAD, 162.
 D.B., 1 m. from rly. sta.
NASIR JANG, NIZAM, 75, 76, 560, 610.
NALATIGIRI HILLS, 503.
NAULA, 763.
NAUPADA, 516.
NAUSHAHRA (Kashmir), 397.
NAUSHAHRA (Peshawar), 383. See *Nowshera*.
NAVSARI, 192.
NAWALAPITIYA, 667.
NAWANAGAR, 251.
NAZARANI CHRISTIANS, 648.
NEGAPATAM (R.), 667.
Steamship Agents: *B.I.S.N. Co.*
 Rooms at railway station.
Bank: *Imperial Bank.*
European Club.
- NEGOMBO, R.H.**, 759.
NEILL, BRIG.-GENL., cxxxiii, 50, 88, 455, 460, 462, 615, 619.
NELLORE, D.B., 520.
Bank: *Imperial Bank.*
- NELSON, LORD**, 4, 666.
NEPAL, l, 474, 475.
NERAL (R.), 521.
Waiting Room. For Matheran.
- NEW DELHI.** See Delhi.
NICHOLSON, BRIG.-GENL. JOHN, cxxxiii, cxxxiv, 293, 295, 296, 305, 347, 356, 377, 385.
NIGRITING, 497.
- NILAMBUR**, 646.
NILGIRI HILLS, 641-645.
NIMACH (R.), 154.
 D.B. Good Club, with cricket ground, etc., attached.
NIMIA GHAT, 59.
 D.B. 1 m. rly. sta. for Parasnath Mt.
- NIRA CANALS**, cxxxiii, 543.
NISHAT BAGH, 394.
NIZAM-UD-DIN AULIA (Delhi), 76, 288, 297, 312, 321.
NIZAMS OF HYDERABAD, 44, 75, 76, 136, 303, 560.
NORMAN, J. P., 110, 116, 117.
NORTHBROOK, LORD, 10, 59, 110, 223, 304, 457.
NOWGONG (Assam), D.B., 449.
NOWGONG (Bundelkhand), D.B., 177. 19 m. from Harpalpur. Motor Service, 11. per seat; other Services, 1.1½ per seat.
NOWSHERA (Naushahra, Peshawar, R.), cxxxiii, 383.
 D.B. near Post Office.
Bank: *Imperial Bank.*
- NUNCOMAR**, III, 122.
NUR JAHAN OF NUR MAHAL, EMPRESS, 207, 268, 279: 338, 368, 393, 394, 494.
NURPUR (Kangra), 349.
NUSHKI, 418.
- NUWARA ELIYA**, 733, 747.
Hotels: *The Grand; St Andrew's H.*; and others Also *Carlton* and other Boarding Houses.
Clubs: *Hill Club; United Club; Golf Club.*
Stores and Chemists: *Cargills, Ltd.; Miller & Co.; N. Eliya Apothecaries Co.; Grand Oriental Stores; Abram Saibo & Co.*
 The Golf Links are excellent.
- NYAUNGU (R.H.)**, 716-717.

OBSERVATORIES (JAI SINGH), 95, 154, 225, 314, 325.
OCHTERLONY, GENL. SIR D., 112, 162, 337, 341.
OIL, 501, 720.
OKANDA, 775.
OKHAMANDAL, 251

OLAVAKKOT, 646.
OMICHAND (Amin Chand), 127.
OMKARJI, 147.
See *Mandhata*.
ONGOLE, 520.
OOTACAMUND, 642-645.

Hotels: *Savoy H.*; *Hotel Cecil*.

Boarding Houses: *Westward Ho!*; *Fir Grove*; *Maplecroft*; *Kingscliff*; *Willingdon House*; *Summer House*.

Clubs: *Ootacamund C.*; *Gymkhana C.*; *Golf Club*.
Bank: *Imperial Bank*.

Nursing Homes: *Ratan Tata*; *Willingdon*; *Nilgiri*.

Schools: *Lawrence Memorial School*; *Breeks' Memorial High School*; *St Hilda's*; *Nazareth Convent*.

Chemists: *Spencer & Co.*; and the *Nilgiri Pharmaceutical Co., Ltd.*

Dentists: *Dr Hunter*; *Dr Badcock*; *Dr Glen Crim*.

Medical Men: *The Civil Surgeon*; *Dr Long*.

Newspaper: *South of India Observer*.

Photographers: *W. Burke*; *Sunbeam Photo Works*.

Drapers: *Wrenn, Bennett & Co.*; *Bailey Bros.*

General Merchants: *Spencer*; *Wrenn, Bennett & Co.*

Jewellers: *Barton & Son*; *The Jewellers, Ltd.*

Tailors: *Bailey Bros.*; *A. E. Irvine*.

Motor Works: *Oakes*; *Simpson & Co., Ltd.*

OPANAKE, 752.

OPIUM, cxxii, 64, 474.

ORAI (R.), D.B., 175.

ORCHHA, 176.

ORISSA, 504.

OSMANABAD, 136.

ODDH, NAWAB, WAZIRS AND KINGS OF, cxxxii, cxxxiii, 61, 88, 90, 121, 313-314, 429-430, 438, 449, 450, 610.

OUTRAM, GENL. SIR JAS., cxxxv, 116, 128, 450, 451, 454, 456, 457, 458, 461-464, 467.

OXINDEN, SIR G., 193, 194.

P

PA-AN, D.B., 725, 726.

PABBI, 383.

PACHBADRA, 214.

PACHISI GAME, 275, 283.

PACHMARHI, 46.

Hotel: *Hill H.* Three Boarding Houses.

Motor from Piparia. Seat in mail motor, rs. 4 to rs. 8; special motor rs. 20 to rs. 32; other motors, rs. 2 to rs. 4. Tel. address of Motor Service, "*Mallagents*."

PADROADO, 21, 27, 557.

PAGAN, R.H., 717-719.

PAGAT, D.B., 725.

For Kawgun Cave (2 m.).

PAGODAS. See *Stupas*

PAHALGAM, 396.

PAITHAN, 86.

PAKOKKU, 716, 730.

PAK PATTAN, 400, 403.

PALAMCOTTA, 678.

Missions: *C.M.S. Training Institution*; *Schools*; *Sarah Tucker Institution*; *Tamil Mission Church*.

PALAMPET, 569.

PALANPUR (Kangra) (R.), 348, 350.

PALANPUR (Bombay) (R.), D.B., 210.

PALETWA, 728.

PALEZA GHAT, 473.

PAL GHAT, 645, 646.

PALITANA, 236.

Doolies for Satrunjaya can be obtained either privately or through the officers of the Palitana Darbar.

PALLAI, R.H., 762, 769.

PALLAVARAM, 626.

PALLNI, 672.

See also *Kodaikanal Road*.

PALUTUPANA, R.H., 758, 775.

PALWAL, 265.

PAMBAN, 680.

PANCHGANI, 544.

PANDAVAS (PANDUS), lxii, 151, 265, 330, 422, 544, 636, 676.

PANDHARPUR, 537.

PANDRETHAN, 395.

PANDUA (Hooghly), 67.

PANDUA (Malda), 480, 482.

PANDUGHAT, 497, 499.

Motor Service to Shillong.

PANDYAN KINGS, lxvi, 673, 734, 745.

PANHALA, 550.

PANIPAT, R.H., lxii, lxx, c, 181, 327-329, 356, 359.

PANJIM, 553. See *Goa*.

PANKULAM, R.H., 760.

PANNIAR, 120, 181.

PAPANASHAM, 679.

PARASIA, 141.

PARASNATH MOUNTAIN, xcvi, 59.

From Isri or Nimiaghath

PARBATI HILL, 533.

PARBATIPUR (R.), 483, 484.

PARIHASAPURA, 393.

PARSIS, lxxv, 3, 4, 7, 13, 21, 24-26, 192, 194, 196.

PARTABGARH (Oudh), 429.

PARVIZ, PRINCE, 44.

PASSARA, 750, 776.

PASTEUR INSTITUTES, KASALI, 332; COO-NOOR, 641; SHILLONG, 498; RANGOON, 697.

PATALIPUTRA, lxv, 65, 153.

PATALKOT, 141.

PATALPANI, 148.

PATAN (Anhilwara), 210.

PATAN (Kashmir), 393.

PATAN SOMNATH, 246.

R.H. of Junagarh State.

PATANCHERU, 558.

PATHANKOT (R.), D.B., 347.

For Kangra Valley Rly.

PATIALA, 539, 540.

PATNA, D.B., 63.

Missions: *Baptist*; *Zemana (Duchess of Teck Hospital)*; *R.C. Church*.

Banks: *Imperial Bank*; *Allahabad Bank*.

PATTADAKAL, xcvi, 582.

PATTIKONDA, 540, 589.

PATTIPOLA, R.H., 748, 749.

PAVAGADH (Champaner), 252.

PAWANGARH (Kolhapur) 550.

PAYER, xciii, 395.

PEARL FISHERY, 727, 762.

PEEL, SIR WM., CAPTAIN R.N., 110, 443, 456, 458, 467.

PEGU (R.), 704, 705.

Two D.Bs.

Club.

Motors and motor supplies available.

PENDRA ROAD, 142.

PENUKONDA, 592.

PERADENIYA, R.H., 696, 742.

PERIM, xlv.

PERRIAR, 649.

PERRON, GENL., 133, 435, 436.

PERTAB SINGH, MAHARAJA, SIR, lxxiv, 209, 215, 216.

PESHAWAR, 383.

D.B. (on Sadr Bazar Road).

Hotels: *Dean's H.* near the Mall; *Provincial R.H.*, opposite the rly. sta.

Club, near the Church.

Banks: *Imperial Bank*; *Chartered Bank*.

Agents: *Grindlay & Co.*

Dealers in Central Asian Goods in City: *Sajdar Ali*; *Haji Rahman*; *Mal Chand*; *The Kabul Co.*

Churches: *St John's* (C.E.); *St Michael's* (R.C.).

Missions. See p. 384.

Taxis available.

Hackney Carriages: Class I. II.

Per 1st hr. . . 1 r. 10 as.
Subs. hr. up to
5 hrs. . . . 8 as. 6 as.

Motors available. A railway now runs through the Khyber Pass to Landi Khana; no permit required. Passengers by road who are proceeding beyond Michni Kandoo must obtain a permit in advance from the Political Officer, Khyber. The conditions on the permit should be specially noted.

PESHWAS (HEAD OF THE MAH-RATTAS), lxx, 12, 37, 41, 47, 96, 99, 173, 176, 179, 328, 439, 526-527, 528, 531, 533.

PETLAD, 199.

PHALERA (R.), 219, 223, 232.

PHALUT, 488.

PHILLAUR, 342.

PIGOT, LORD, 615, 616, 618, 666.

PILIBHIT, D.B., 426.

PIND DADAN KHAN, 372.

PINDARI GLACIER, 428.

PIDURUTAGALA MT., 747.

PINGLI, 86.

PIPARIA (for Pachmarhi), 45. R.H. (notice should be sent to ensure meals being provided. Motors available

by writing to Mail Contractor at Pachmarhi. Motor-taxis also obtainable at rly. sta. Special motor, rs. 20 to rs. 32; mail motor, rs. 4 to rs. 8; other motors, rs. 2 to rs. 4. Cart Chaudhri arranges for country carts for luggage; but motor-lorries are also available. Dispensary for outdoor patients.

PIPRAWA, lxxix, 475.

PIR PANJAL, 397, 398.

PISGAH PEAK, 388.

PISHIN, 418.

PITHORA, RAI (PRITHVI RAJA), 290, 315, 330, 340, 437.

PLASSEY, 105, 119, 441, 477.

PODANUR (R.), 640, 672.

Sleeping accommodation at the rly. sta.

POLGAHAWELA (R.), 741, 760.

POLLACHI, 640, 672.

POLLILORE, 633.

POLLOCK, GENL., 386.

POLONNARUWA, R.H., xcvi, 761, 770-772, 773.

PONDICHERRY, D.B., 656.

Hotels: *Grand Hotel de l'Europe*, Rue Suffren; *L'Alsacien*, Rue de Bussy.

English Consul: *Major H. G. Tranchell*, Rue St Louis.

Steamship Agents: *B.I.S.N. Co.*, Agent, M. Gallois Montbrun, Rue d'Orléans; *Messageries Maritimes*.

The B.I. Steamers from Madras to Singapore call at Pondicherry, but not the steamers to and from Europe. A passenger service to and from Marseilles (nearly monthly) is maintained by the *Messageries Maritimes*, whose steamers on the Colombo-Saigon line call at Madras and Pondicherry.

Bank: *Banque d'Indo-Chine* (Madras Agents, National Bank of India; London Agents, National Provincial Bank). Issues notes which are not current in British India.

PONNANI, 649.

PONNERI, 520.

POONA (R.), 528, 536.

Hotels: *Connaught H.*, *Napier H.*; *Poona H.*; *Majestic H.*

Bank: *Imperial Bank*.

Churches: *Anglican*, *St Mary's*, *St Paul's*, *Garrison Ch.* (Ghorpuri), *All Saints* (Kirkee); R.C., *St Patrick's Cathedral* and two churches; *Scotch Church*.

Clubs: *Western India C.*, *Gymkhana C.*, *Royal Connaught Boat C.*, *Turf Club* (for Europeans and Indians); *Ladies' C. Deccan Gymkhana C.*, *Parsi Ladies' Club*.

The *Boat Club* forms an important feature in the amusements of the place. *Gymkhana Club* and *Library*. A visitor, introduced by a member, can join the Club. On the cricket-ground, attached, are played the principal matches during the monsoon months.

Golf Club, good links; full course.

Mail Contractors:

Deccan Motor Co., 11 Elphinstone Road.

Motors can be hired of Deccan Motor Co., Bombay Cycle and Motor Co., Arsenal Rd.; Mehta & Co.; Mody's Cycle and Motor Mart, East St.; and Wellington Cycle Co., Arsenal Road. Hire rs. 7 per hr., rs. 50 per diem. Outside limits of place, as 8 per mile. To Mahabaleshwar (in 4½ hrs., 3 passengers), rs. 75, or as arranged.

Taxi-cabs: ply for hire during the season (June-October).

Hackney Carriages:

By time—

Per day . . . 6 rs.

Half-day . . . 4 rs.

Per hr. . . . 1 r.

Large number of fares by distance.

Newspapers: *Deccan Herald* and *Evening Dispatch*.

Dentist: *D. H. Davison*.

Chemists: *Poona Drug Stores*, 318 Main St., and 19 Kirkee.

Photographers: *Stewart*; *Backhouse*.

Drapers: *Asquith & Lord*, 6 Arsenal Road; *Whiteaway Laidlaw & Co.*, 6 East St.

Tailors : *Leach & Webber*, 7 Arsenal Road.
General Merchants :
Dorabji & Co., Treacher Bldgs., Arsenal Rd.
House Agent : *P. D. Dikshit*.
Missions. See p. 530.
Cowley Wantage Mission, Panch Howds, Poona City.
 C.M.S. station (Mission House at Cyprus Lodge), Divinity School.
PORADHA, 484, 492.
PORBANDAR, D.B., 249.
Bank : *Imperial Bank*.
PORTO NOVO, 659.
PORT SAID, xxxix.
PORT SUDAN, xlv.
PORTUGUESE IN INDIA, 2, 21, 27, 33, 34, 37, 126, 132, 133, 191, 192, 193, 199, 495, 552, 557, 595, 617, 624, 625, 626, 646, 647, 648, 650, 652, 654, 659, 667, 678, 680, 688, 703, 734, 756, 757, 769, 773.
POSHIANA, D.B., 398.
PRACHI ROAD, 238, 246.
PRATAPGAD (Partagarh), 546.
PRAYAG, 49.
PRINCE CONSORT, 22.
PRINCE OF WALES, 16, 118, 743.
PRINSEP, JAS., 51, 90, 97, 115, 122, 317, 506, 525.
PROME, 720-727.
 Small Travellers' Bungalow. Meals should be taken on the steamer.
PUDUKKOTTAI, 667.
PULICAT, 520, 619.
PUNCH, D.B., 398, 399.
PUNPUN, 65.
PURANDHAR, 535.
PURI (Jagannath), 510.
Hotels : *Bengal Nagpur Ry. H.; Beach H.; Ashworth H.*
PURNA, 86.
PURNEA, 483.
Bank : *Imperial Bank*.
PURULIA, D.B., 145.
PUSA, 474.
PUSHKAR LAKE, D.B., 223.
PUSSELLA, 752.
PUTTALAM, R.H., 759, 776.
PVAPALLI, 589.
PVINMANA, 706.

Q

QUEEN ALEXANDRA, 118.
QUEEN EMPRESS VICTORIA, cxxxvii, 10, 49, 50, 52, 91, 113, 116, 118, 208, 253, 302, 304, 344, 355, 356, 376, 394, 410, 416, 444, 462, 468, 600, 617, 623, 702.
QUEEN MARY, 13, 19, 118, 162, 366, 561.
QUESTA (R.), D.B., 417.
Hotels : *Stanyon's H.*, S. of Hazar, some distance from Cantonments; *Lourdes' H.*, more central.
Club : *Quetta C.*
Bank : *Imperial Bank of India* (in Cantonments).
Missions : *C.M.S., R.C. Church; Scotch Church; Methodist Episcopal C.*
Chemists : *Bliss; Imperial Medical Hall.*
Outfitters : *Hoar & Co.; Younsuff; Ball, Moody & Co.*
Hackney Carriages : Rates by time and distance have been settled in great detail, and should be ascertained.
QUILON, D.B., 679.
QUINTON, J. W., 500.

R

RAE BARELI, D.B., 429.
Bank : *Allahabad Bank*.
RAGALA, 747.
RAGAMA, 741, 759.
RAICHUR (R.), D.B., 539.
Bank : *Imperial Bank*.
RAIDANI, 398.
RAIGARH, 143.
RAIPUR, D.B., 142.
Banks : *Imperial Bank; Allahabad Bank*.
RAISINA, 322.
 See Delhi, New.
RAIWIND (R.), 354, 400.
RAJAMUNDY (R.), 518.
Bank : *Imperial Bank*.
RAJAORI, D.B., 398.
RAJASAMUND, xcix, 162.
RAJKOT, 250.
D.B. near the Jn. Rly. Sta.
Bank : *Imperial Bank*.
RAJMAHAL, 471.
RAJPUR, D.B., 422.
Hotels : *Chapman's H.; Denis Dale H.; Ellen-*

borough H. These hotels are also Agencies, and with the Imperial Agency supply motors, ponies, dandies and coolies for the traffic to Mussorie. See p. 422. Transhipment from motors to ponies, etc., no longer takes place here, as motor-road from Dehra Dun (g.v.) is now open as far as Bhatta, 4 m. beyond Rajpur.
RAJPURA, 339.
RAJPUTS, the, lxii-lxxiv.
RAKWANA, 753.
RAMATIRTHAM, 517.
RAMAYANA, lxiii, 87, 93, 99, 586, 602, 632, 680.
RAMBHA, 516.
RAMBODA, R.H., 748.
RAMBUKKANA, R.H., 741.
RAMESWARAM, xcvi, 680-682.
RAMNAD, 680.
RAMNAGAR, 92, 93, 100.
RAMPUR (Kashmir), 392.
RAMPUR (Rohilkhand), lvi, 424.
RAMPUR (Simla), 334.
RAMTEK, 140.
RANAGHAT, 476, 483.
RANCHI, 145.
 Express train (12 hrs.) daily from Calcutta (Howrah).
Hotels : *Bengal Nagpur Rly. H.* opp. sta.; *Silver-oaks H.*, Muir Road; *Clayton's Ranchi H.*; two Boarding Houses.
Club : *Ranchi C.*
RANDER, 195.
RANGAMATI, 495.
RANGIT RIVER, 488.
RANGOON, 683, 686, 688, 689, 692, 697-704.
Hotels : *Strand*, on Strand Road (rebuild); *Minto Mansions*, Halpin Road; *Royal*, 4 Merchant St.
English Boarding Houses : *Allandale*, Godwin Road; *Croton Lodge*, Ahlon Road; and *Wexford*, Simpson Rd.
Restaurants : at above hotels; also the *Silver Grill*, Fytche Square; *Romani's*, corner of Phayre and Merchant Streets; *Social Restaurant*, Phayre St.; *Anderson's*, Sule Fa-goda Rd.

Clubs: *Pegu Club*, Prome Road Cantonments (residential); *Burma Club*, Merchant Street; *Rangoon Club*, Lake Avenue; *Y.M.C.A.*, Dalhousie St.; *Y.W.C.A.*, Brooking St.; *Gymkhana Club*, Halpin Road—a favourite resort in the evenings. Lady members. Tennis-courts, billiard tables, reading-room, bar, etc. Military band most evenings; *Boat Club*, Royal Lakes (now rebuilt on a much larger scale); *Kokine Club*, Kokine.

Agents and Bankers: *Thos. Cook & Son*, Phayre Street; *A. Scott & Co.*, Merchant Street (for *Grindlay & Co.*).

Banks: *Imperial Bank of India*, Sule Pagoda Road; *Chartered Bank of India, Australia, and China*; *National Bank of India*; *Hong Kong and Shanghai Banking Corporation*; *China and Southern B.*; *Mercantile B. of India*; *International Bg. Corpn.*; *Netherlands Trading Society*, Merchant Street; *Allahabad Bank*.

Booksellers: *Smart & Mookerdum*, Barr Street; *American Baptist Mission Press*, Merchant Street; *Rowe & Co.*, Dalhousie St.; *Burma Book Club*, University College, Commissioner Road.

Chemists: *E. M. de Souza & Co.*, Dalhousie Street; *Sun Drug Co.*, Sule Pagoda Road; *British Pharmacy*, Dalhousie St.; *R. S. Rae & Co.*, Sule Pagoda Road.

Pastour Institute.

Consuls: *U.S.A.*, Sofaers Buildings, Phayre Street; *France*, Consular Agent, c/o Steel Bros. & Co., 26 Merchant Street; *Germany*, Merchant St.; *Netherlands*, c/o Messink & Co., 10 Maungtanlay St. Other countries are also represented by Consuls or Vice-Consuls.

Conveyances: Hackney carriages, drawn by single ponies, can be hired at fixed charges, viz., 1st class, $\frac{1}{2}$ hr., as. 8; 1 hr., r. 1-4; each subseq. $\frac{1}{2}$ hr., as. 6; for area between Morton St. in W.

and Thompson St. in the E., and S. of ry. line. Elsewhere, as. 8 per mile. 2nd class at cheaper rates. The drivers are Indians who do not understand English: they understand Hindustani and (rarely) Burmese. All have to display scale of fares.

Taxi-cabs are numerous, easily obtainable. Fares: as. 12 for 1st mile, and as. 2 for each subsequent $\frac{1}{2}$ mile. Waiting charges, r. 1-14 per hr. The foremost firm is *Parrott's Taxi Co.*, Newlyn Road, who make no charge for the outward journey from the garage to the residence.

Motor Omnibuses: The Rangoon Electric Tramway and Supply Co. run an excellent service along all the main routes in and around Rangoon. Fixed prices at very cheap rates, according to stages.

Tramways: An electric tramway (little used by Europeans or visitors) runs from the Strand Road to the Great Pagoda along China Street and Pagoda Road; another line along Dalhousie Street from Kemmendine to Pazundaung; a third line along Strand Road from Lanmadaw to Dunnedaw; and a fourth from Strand Rd. to Mangon Rd., near the Royal Lakes.

Craftsmen: The best centre for shopping is the *Scott Market*, in Montgomery Road. The principal Burmese silversmiths, goldsmiths, and wood-carvers are to be found in Godwin Road; specimens of Burmese wood-carving can also be obtained at the Central Jail; images of Gaudama in brass and alabaster, and kalagas (appliqué work) in Kemmendine. Dealers in these and Oriental goods, *Hirst*, Phayre St.; *Goona Mal Parasram*, 73 Phayre St.; *Khaimchand Tejmal*, 82 Dalhousie St.

Dentists: *W. G. Thompson*; *A. M. Murray*; *H. B. Osborn*; *J. H. Drinkall*; *T. Satow*.

General Stores: *Scott & Co.*, Merchant Street; *Bar-*

nett Bros., Sule Pagoda Road; *Barnes & Co.*, Dalhousie St.; *Burma Cold Stores*; *J. A. David & Co.*; *Give & Take Co.*, Scott Market.

Hairdressers: *Watson & Son* and others in Phayre Street; also at hotels.

Medical Men: The Civil Surgeons at the General Hospital; private practitioners and lady doctors.

Outfitters: *Rowe & Co.*; *Whiteaway, Laidlaw & Co.*; *Macfie & Co.*; *Watson & Son*; *Brisbane & Bratley*.

Missions: *Anglican American Baptist*; *Scotch Church*; *R.C. Church*.

Newspapers: *Rangoon Gazette* and the *Rangoon Times*. The leading vernacular newspapers are the *Sun*, *Light of Burma* and *Knowledge*.

Photographers: *D. Ahuja*; *Samuel*, both in Sule Pagoda Road; *T. N. Ahuja*, Phayre Rd.; *London Art Photo Co.*, Merchant St.

Railways: There are two lines out of Rangoon—

(1) The *Irrawaddy Line* running to Prome, and connecting with Henzada and Bassein.

(2) The *Sittang Line* running to Pegu (branch to Moulmein), Toungoo, Thazi (branches to Kalaw and Myingyan), and Mandalay (branch to Maymyo), and thence to Myitkyina.

The terminus for both lines is at King George Avenue. The Irrawaddy line has pick-up stations at Godwin Road, Prome Road, and Alon, and a large station at Kemmendine.

River Steamers: *Irrawaddy Flotilla Co.*, 4 Phayre Street. Express steamers (1st and 2nd class) twice weekly to Mandalay; three times a week to Bassein; twice weekly to Henzada; also various ferry services.

Steamship Companies: *P. & O. Line*, *British India S.N.*, and *Bibby Line*, Bulloch Bros. & Co., Strand Road; *Henderson*

Line, Steel Bros. & Co., Merchant Street. Passages on all lines booked by Thos. Cook & Son, Ltd., Phayre Street, A. Scott & Co., Merchant St. (Agents for Grindlay & Co.), and Gilanders, Arbutnot & Co., Strand Road.

RANGPUR, D.B., 484.

Bank: *Imperial Bank.*

RANIGANJ, 66.

Three D.Bs. Inspection Bungalow.

RANIKHET, D.B., 427, 428.

RANIPET, 610.

RANJIT SINGH, MAHARAJA, lxvi, lxvii, 98, 341, 343, 347, 353, 356, 359, 360, 363, 364, 368, 381, 382, 387, 391, 402, 511.

RANNA, R.H., 757.

RATANPUR, D.B., 143.

RATLAM, D.B. (R.), 154, 253.

RATNAPURA, R.H., 752, 755.

RATTAN PIR PASS, 398.

RAUZA, 75.

See Ellora.

RAWALPINDI (R.), 376; route to Kashmir, 391.

Hotels: *Flashman's H.; Metropole H.*

Club: *Rawal Pindi C.*

Agents: *Cox & King, Cantonment.*

Banks: *Imperial Bank; Lloyd's Bank; Bank of Northern India.*

Missions: *American Presbyterian; Scotch Church; R.C. Church; S.P.G.*

Chemists: *Wilson; Jagat Singh & Bros.*

General Merchants: *Jamasji & Sons.*

Tailors: *Ranken; Pearson.*

Motors: *Govt. Motor Mail Service; Kashmir Motor Service (Radha Kishan Sathi & Sons).*

Taxis available.

Tongas:

	Class I.	II.
1st hr.	1 r.	12 as.
Sub. hr.	8 as.	6 as.

READING, LORD, 325.

REAY, LORD, 10.

RED SEA, the, xlii-xlv.

REENGUS, 229, 232.

RENIGUNTA (R.), 541.

Jn. for Tirupati and S.I.R. Rooms at rly. sta.

RESIDENCY (Lucknow), 457-461.

RETI (R. and good rly. R.H.), 404.

REWAH, 48.

By motor-lorry from Satna.

REWARI (R.), 231, 232, 352. **R.H.** not far from rly. sta.

RINDLI, 416.

RIPON, LORD, 116, 615, 622.

RISHI-KESH, 422.

ROBERTS, LORD, 116, 294.

ROE, SIR T., 44, 150, 195, 201, 220.

ROHLKHAND (Rohillas), 425.

ROHRI, 404, 411 (District Bungalow for Govt. Officers).

ROHTAS (Jhelum), 373.

ROHTAS (Shahabad), D.B., 56.

RONALDSHAY, LORD, 108, 111.

RONGNYE RIVER, 488.

ROORKEE, D.B., 420.

ROSE, SIR HUGH, LORD STRATHNAIRN, CXXXVI, 174, 176, 182, 183.

RUBY MINES, BURMA, 704, 716.

Motor Service from Thabeikkyin in 4-6 hrs.

RUK (R.), D.B., 412, 415.

RUMMIN DEI, lxxvii, 475.

RUNN OF CUTCH, 233.

RUPAR, 341.

RUPNARAIN RIVER, 135, 502.

RUPNATH, 47.

RUSSELLKONDA, 516.

RUWANWELLA, R.H., 752.

S

SABARMATI, 209, 233.

SABATHU, 332.

SADHARA, 170.

SADIYA, 500.

SADRAS, 619, 638.

SAGAING, 713, 714, 730.

Terminus for rly. to Myitkyina. Ferry communication with Mandalay (Amarapura Shore).

SAGAR ISLAND, 134, 135.

SAHARANPUR (R.), D.B., 339, 419.

Bank: *Imperial Bank.*

Churches: *St Thomas' Ch.; and American Presbyterian Mission Ch.*

SAHETH-MAHETH, civ, 429, 463.

SAHIBGANJ (R.), 66, 472.

SAIDABAD, D.B., 397.

SAIDAPET, 624.

SAIKHOA GHAT, 500.

SAIYAD AHMAD KHAN, SIR, 436.

SAKYAMUNI, 88, 475.

See Buddha.

SALAR JANG, SIR, 84, 530, 562, 564, 567.

SALBAI, TREATY OF, 3.

SALE, SIR R., 354, 388.

SALEKASA, 142.

SALEM JUNCTION (R.), 659.

Sleeping accommodation at rly. stn.

Starting-point for Yercaud and the Shevaroy Hills.

Five motor-buses ply between Salem and Yercaud; charges vary according to season and demand; usually r. 1-8 for the upward and r. 1 for the downward journey.

SALEM, 659.

The town of Salem is 3½ m. from the jn. stn. It is not passed on the way to Yercaud.

Club: *English Club.*

Bank: *Imperial Bank at Salem Town.*

SALKELD, I.T., 116, 296.

SALSETTE ISLAND, 6, 27, 191.

SALT, CXXII, 219, 372, 374.

SALUVAN KUPPAN, 635.

SAMAGUTING, 500.

SAMALKOT, 518.

SAMASATA, 404.

SAMASTIPUR, 473.

SAMBAL (Kashmir), 393.

SAMBALPUR, 143.

D.B., and Circuit House.

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SANDHURST, LORD, 10.
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Waiting Room at station
10 m. from town, where
there is a D.B.

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Motor lorry runs to
Rewah (31 m.).

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590.

Hotels: *Montgomery H.*;
Percy H.

Banks: *Imperial Bank*;
Central Bank.

Clubs: *United Service*
C.; *Gymkhana.*

Medical Men: *Resi-*
dency Surgeon; *Dr Nundy*;
Dr E. H. Hunt; *Dr Taylor.*

Drapers: *Wrenn, Ben-*
nett & Co.

General Merchants:
Spencer & Co.

Optician: *Dr Probert*,
James Street.

Chemists: *Dias*, Ox-
ford St.; *Leslie Gay*, St
Mary's Rd., near sta.

Tailor: *John Burton*,
Alexandra Road.

Photographers: *Raja*
Dindayal and others.

Taxi stand opp. Percy
Hotel: as. 12 a mile.

Motors: *E. C. Jones*;
Bombay Motor Agency.

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D.B. Provisions should
be brought.

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Missions: *Baptist Col-*
lege and Schools; *Zenana.*

SERINGAPATAM, 564, 603-
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R.H. at Darya Daulat
Bagh may be used by
permission of the Darbar.

SEVEN PAGODAS, 634-
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Club: *Shahjahanpur C.*

Bank: *Allahabad Bank.*

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SHEVAROY HILLS, 659.
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SHIKARPUR (Kashmir),
D.B., 398.

SHIKARPUR (Sind), 415.

D.B. and rly. *R.H.*

SHIKOHABAD, 437.

SHILLONG, D.B., 499.

Motor service (6-9 seats)
daily to Pandu Ghat, where
the Brahmaputra is crossed
for rail to Calcutta. Fares:
No. 1 Service, rs. 24; No.
2 Service, 1st class, rs. 10.
Only one handbag allowed
in passenger cars.

Bank: *Imperial Bank.*

Hotels: *La Chaumiere*;
Pinewood H.; *Ferndale H.*

Churches: *All Saints'*
Church (C. of E.); *R.C.*
Church; *Welsh Presby-*
terian Church.

Pastore Institute.

SHIMOGA, D.B., 594.

Motor-bus service to (65
m.) Gersoppa Falls.

SHIPKI PASS, 334.

SHIVPURI (Sipri), 173, 180.

Hotel: *Shivpuri Hotel.*

Bank: *Imperial Bank.*

SHOLAPUR, D.B., 537.

Bank: *Imperial Bank.*

SHORANUR (R.), 646.

Junc. of branch line to
Cochin.

SHUJA, SULTAN, 119, 132, 471.

SHUJA-UD-DAULA, 61, 430, 449.

SHUPIYAN, D.B., 398.

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Bank: *Imperial Bank.*

SIBI (R.), D.B., 416.

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Hotels: Cecil (Falletti's) H.; Grand; Corstorphan's H.; Elysium H.

Churches: Christ Church (C. of E.); Union Church (Undenominational); Scotch; R.C.

Banks: Imperial Bank; Bank of Upper India; Lloyd's; Mercantile Bank; Simla Bkg. and Indust. Co.

Agents: Thos. Cook & Son, The Mall; Grindlay & Co.

Newspapers: Simla Times; Liddell's Weekly.

Chemists: Plomer; Bliss; Reeves Brown; Cotton.

Photographers: Bremner; Jenkins.

Drapers: Whiteaway Laidlaw; Clarke; Harrison, Hathaway & Co.; Richards.

Tailors: Coutts; Ranken; Phelps; Fillingham; Parker; Jones.

General Merchants: Cotton & Morris; Kellner; Framjee Morton.

Clubs: United Service, above Combermere Bridge. Annandale Gymkhana C.; Amateur Dramatic Club; Chelmsford Club.

Hospitals: Walker; Ripon (chiefly for Indians); Lady Reading (for Women); Lady Chelmsford's Maternity and Infant Welfare Centre.

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Bank: Imperial Bank.

SIRATHU, 446.

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Banks: Imperial Bank; Allahabad Bank.

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SITTAUNG, 500, 730.

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SONAMARG, 397.

SONARI, 170.

SONEPAT, 327.

SONEPURE, 473.

SONGADH, 235.

From here is one route to Vala. Address the Deputy Asst. Pol. Agent for a conveyance. See also Dhola.

SOOKNA, 485.

SOPARA (Bombay), 35, 37.

SOPOR (Kashmir), 392, 393.

SPEZAND, 416, 418.

SRAVANA BELGOLA, 598.

SRINAGAR (Kashmir), D.B., 393.

Hotel: Nedou's Hotel.

Visitors to Srinagar generally live in house-boats, or in tents pitched in the various lovely groves which surround the city.

The best camping-grounds are the Munshi Bagh, the Ram Munshi Bagh, and the Nasim Bagh (on the Dal Lake).

The Motamid Darbar (the State official appointed to

look after the interests of visitors) will give any information as to quarters, prices, coolies, etc.

Banks: Imperial Bank; Lloyd's B.

Cockburn's Agency and the Kashmir General Agency undertake the hire of boats, tents, furniture, and all camp requisites, which should be ordered to be ready on arrival. They also advise visitors as to purchases, and give every kind of information.

Agents: Cox & King English Church Service every Sunday in the English Church in the Munshi Bagh.

Missions: The C.M.S. has a station and doctors here, and a fine hospital.

Kashmir Visitors' Rules: Copies are obtainable from the Motamid Darbar.

Gunsmiths and Tacklemakers in the town.

Club, with golf-course, tennis-courts and library.

Medical Officers: The Residency Surgeon, the Mission Doctors and several private practitioners.

Photographers: Mr W. Lambert; P. Vishinath.

SRINAGAR (Kathiawar), 249.

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D.B. ½ m. from sta.

Bank: Imperial Bank.

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SULTANPUR (Kulu), D.B., 335, 350.

SULTAN'S BATTERY, 652.

SUNAWIN, 393.

SURAJ-UD-DAULA, 105, 124, 477, 478, 479.

SURAT, 2, 192.

R. Some sleeping accommodation and Waiting Room at rly. sta. D.B. at Nanpura on river-bank, near the Post Office, and about 2 m. from rly. sta.

Bank: *Imperial Bank.*

Inlaid work and carved sandal-wood are still obtainable in Surat, though less than formerly. Brocade work, silks, and silver-gilt wire are manufactured.

SURMA VALLEY, 495.

SUTANATI, 105, 132.

SUTKATTA, 552.

SUTLEJ VALLEY IRRIGATION PROJECT, 219, 400, 404.

SWALLY (Suvali), 195.

SYDENHAM, LORD (SIR GEORGE CLARKE), CXXXIII, 6, 13, 26, 530.

SYLHET, 495.

Four D.Bs.

SVKES, SIR F., 6, 17.

SYRIAM, 688, 703.

T

TADPATRI, 540.

D.B. in the town.

TADRI, 654.

TAGAUNG, 687, 716.

TAKHT-I-BAHAI, xcvi, 383.

TALAI MANNAR, 680, 762.

Ceylon terminus of rly. route to India—steamer to Dhanushkodi, 22 m.

TALAWAKELE, R.H., 746, 747.

Chemists and Store: *Jordan & Co.* (2½ m.).

TALBAHAT, D.B., 172.

TALIKOTA, lv, 585.

TAMLUK, 135, 502.

TANDUR, 557.

TANGALLA, 757.

R.H. pleasantly situated close to the sea.

TANGROT, D.B., 373, 398.

TANJORE (R.), xcvi, 663-666.

Rooms for five persons at the rly. sta.

D.B., close to station, to the E. of the Little Fort, where pony and bullock-carts are available.

Club: *European Club.*

Mission: *S.P.G. Wesleyan.*

TANSA LAKE, 35.

TANTIA TOPI, CXXXV, CXXXVI, 174, 181, 182, 443.

TANUR, 649.

TAPTI BRIDGE, 43.

TARA DEVI, 332.

TARAGARH, 222.

TARAKESWAR (Bengal), 131.

TARN TARAN, D.B., 347.

TATTA, 408.

There is only an Indian R.H. here, but there is a D.B. (food must be taken) on the *Makli Hills*.

TAUNG-GYI, D.B., 706.

TAVERNIER, J. B., 44, 84, 259, 268, 280, 300.

TAVOY, 727.

Bank: *Chartered*

Bank.

Club.

TAXILA, D.B., civ, 378-380.

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TEESTA RIVER, 488.

TELDENIYA, R.H., 745.

TELLICHERRY, 651.

D.B. There is also an excellent little Club.

Bank: *Imperial Bank.*

TELLULA, R.H., 754.

TEMPLE, SIR R., 10.

TENASSERIM, 726.

TENKASI, 679.

TEZPUR, D.B., 497.

Club.

THABEIKKYIN, 704, 716.

THACKERAY, W. M., 116.

THAL GHAT, 36, 38.

THANA, D.B., 37.

Hotels: *Diamond Jubilee H.; Dharmasala for Indians.*

Bank: *Imperial Bank.*

THANAMANDI, D.B., 398.

THANDAUNG, D.B., 706.

THANESAR, 330.

THARRAWADDY, 722.

THATON, 705, 723.

THAYEKHETTAYA, 721.

THAYETMYO, 720.

THAZI, 706, 716.

THEOG, 334.

THERIA GHAT, D.B., 498.

THOMAS, G., 329, 338, 352.

THOMASON, J., 420, 426, 478.

TIKAK, 500.

TIKAMGARH (Tehri), 176.

TILLA, 374.

TIMUR, lv, 290, 309, 314, 317, 402, 420.

TINDHARIA (R.), 485.

TINDIVANAM, D.B., 655.

TINNEVELLY, D.B., xcvi, 678.

Bank: *Imperial Bank.*

Missions: *S.P.G. station (at Nazareth); C.M.S. College; Baptist Mission.*

TINPAHAR, R.H., 66, 471.

TINSUKIA, 500.

TIPU SULTAN, lvi, 112, 588, 592, 600, 603-605, 609, 618, 638, 647, 650, 653, 680.

TIRHUT, 473.

TIRTH LAKE (R.), 415.

TIRUCHENDUR, D.B., 679.

TIRUKALIKUNRAM, 638.

TIRUPATI, 541.

Refreshment and Sleeping Rooms at Renigunta Junction station. Write beforehand to Station-master for conveyance.

TIRUPATTUR, 638.

TIRUR, 649.

TIRUTURAIPUNDI, 661.

TIRUVALUR (West of Madras), 542.

TIRUVALUR (Tanjore Dt.), D.B., xcvi, 661.

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TISSIANVILLAI, 679.

TISTAMUKH GHAT, 494.

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TOTAPOLA MT., 748.

TOUNGGOO, 704, 705.

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TRANQUEBAR, 130, 662.

TRAVANCORE, 680.

TREVELYAN, SIR C., 616, 622.

TRIBENI (Kathiawar), 248.

TRICHINOPOLY (R.), 639, 667.

Sleeping accommodation at rly. sta. (tolerable, but rather noisy); *Robert's H.* in Cantonments; D.B. 1 m. from sta.

Bank: *Imperial Bank.*

Club: *Trichinopoly C.*

Missions: *S.P.G.; Wesleyan; Lutheran Evangelist; R.C. Cathedral.*

TRICHUR, D.B., 646.

Bank : *Imperial Bank.*

TRIMALGIRI, 569.

TRIMBAK, 42.

TRIMMU GHAT, 347.

TRIMURTI (Triad), lvii, 29, 82.

TRINCOMALEE, R.H., 760, 761, 773.

Motor Service to Anuradhapura, rs.6, c.60; to Batticaloa, rs.10, per seat. Rail from Maho.

Steamship Agents : *Ceylon Steamship Co. Ltd.*

TRIPASORE, 542.

TRIVANDRUM, 680.

D.B. close to Residency.

Bank : *Imperial Bank.*

Club.

Golf Links.

TRIVELLORE, 542.

TUGHLAKABAD, 265, 288, 289, 290, 320-322.

TUGHLAK, MUHAMMAD SHAH, 75, 290, 312, 321, 538.

TULJAPUR, 538.

TULSI LAKE, 35.

TUMKUR, 598.

TUNDLA (R.), 437.

TUTICORIN (R.) 678.

Hotel : *Metropolitan H.*

Limited waiting accommodation at rly. stn. A

B.I.S.N. steamer leaves at

5 P.M. on Wednesday and

Saturday for Colombo, and

one arrives from Ceylon on

Monday and Friday about

7 A.M. The journey between

the pier and steamer is made

in a steam-launch (¾ hr.).

Banks : *Imperial Bank ;*

National Bank of India.

Club : *European Club* on

the sea-front.

Missions : S.P.G. (Cald-

well High School, Melur

Secondary School); Sisters

of the Holy Cross (Victoria

Girls' School and Medical

Dispensary). R.C. : St

Francis Xavier's (Jesusit)

High School.

U

UDAIPUR, xcix, 156, 159-162, 254.

Hotel : *Udaipur.* Visitors should write beforehand to Manager, as the accommodation is rather limited.

Hotel car meets visitors at the station on notice being given. Carriages and tongas can also be hired.

Medical Officer : Residency Surgeon.

Mission : *U.F. Church of Scotland*, medical.

UDAIPUR MAHARANAS OF, lxxiii, 94, 156, 159.

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Bank : *Imperial Bank.*

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VEDDAS, 750.

VEHAR LAKE, 35.

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VELLORE, cxxx, 608.

Bank : *Imperial Bank.*

Mission : *American Miss.*

VENGURLA, 654.

VENUR, 653.

VERAVAL, 245.

Travellers may find it convenient to get permission from the Station-master to retain their first-class rly. carriage at the sta., and to sleep in it at night. There are at Junagadh a State R.H., a *Dharmasala*, several bungalows and a palace residence, occupied by officials and high personages in the hot-weather season.

VERINAG, 394, 396, 399.

VICTORIA, QUEEN - EMPRESS.

See Queen-Empress.

VICTORIA MEMORIAL (Calcutta) cix, 117-120.

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D.B. at Kamalapur. See *Hampi.*

VIKARABAD, 558.

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VILLUPURAM (R.), 656.

D.B. 1 m. from rly. sta.

VINDHYA HILLS, 148, 149.

VIRAMGAM, 184, 209, 233.

Waiting Room at rly. sta.

Dharmasala near Great Tank.

Bank : *Imperial Bank.*

VIZAGAPATAM, D.B., 517.

Bank : *Imperial Bank.*

Missions : *Canadian*

Baptist ; American Evan-

gelical Lutheran ; Roman

Catholic.

VIZIANAGRAM (R.), 517.

Bank : *Imperial Bank.*

VRIDDHACHALAM, 656.

VYPIN, 646, 647, 680.

W

WADHWAN (R.), 234.

D.B. close to rly. sta.

WADI, 539, 557. (R.) and beds.

Junction for Hyderabad

(Deccan).

WAGHNAKH, the, 546, 547.

WAI, 543.

D.B. on side nearest Mahabaleshwar Hill.

WALAJAH ROAD, 610.

WALTAIR (R.), 518.

Suburb of Vizagapatam.

Hotels : *Seaview ; Cecil ;*

Brighton.

Club : *European Club.*

WANDIWASH, 655.

WANGAT, 397.

WANKANER, 252.

WARANGAL, 569, 570.

WARDHA, D.B., 137.

Bank : *Imperial Bank.*

Waiting and Refresh-

ment Rooms at rly. sta.

WARRIORE (Uraiyur)

WARIYAPOLA, R.F.

- WARORA, D.B.**, 137.
WATHAR 543 (R.), and Waiting Room at rly. sta. Meals are provided for passengers bound for Mahabaleshwar, if previous notice be given. **Special Motors to Mahabaleshwar**, 3 to 7 persons. **Mail Motor** per seat rs. 12, with 20 lb. luggage.
WATSON, ADMIRAL, 3, 105, 124, 131.
WAZIRABAD (R.), D.B., 129, 370.
WAZIR ALI, 90, 450, 610.
WELIGAMA, R.H., 757.
WELIMADU, R.H., 748.
WELLAWAYA, R.H., 675, 754.
WELLESLEY, MARQUIS (LORD MORNINGTON), 11, 112, 118, 129, 605, 616.
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YALA SANCTUARY, 775. Primitive halting bungalow.
YALE, ELIHU, 615, 618, 619.
YAMETHIN, 706.
YANDOON, 723.
YANKINTAUNG, 712.
YAPAHUWA, 761.
YARU KAREZ, 418.
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ZIARAT, 419.
D.B., with Annexes, open May to Oct.; accommodation can be reserved for 15 days at r. 1 per head per diem, on application to the Political Agent, Sibi. Motor from Kach, rs. 10 per seat.
ZOFFANY, J., 119, 120, 124, 131, 450, 464.
YENANGYAUNG, 719-720, 727.
YENNA FALLS, 546.
YEOTMAL, 137.
Bank: Imperial Bank.
YERCAUD (Shevaroy Hills), 639.
 By motor-bus from Salem (q.v.).
Hotels: Tipperary Hotel; Fair Lawns; also a Boarding House.
Medical Men: Civil Assistant Surgeon and several private practitioners.
Petrol: Depot in Tipperary Hotel compound.
YERUPALAIYAM, 570.
YE-U, 713.

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